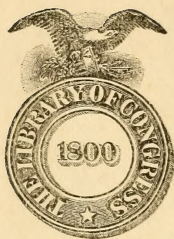


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HOW TO GROW ROSES



ROBERT PYLE



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HOW TO GROW ROSES

DEDICATED BY THEIR PRESIDENT TO THE
MEMBERS OF THE AMERICAN ROSE SOCIETY
(INCLUDING PROSPECTIVE MEMBERS)



THIRTEENTH EDITION, 1920
REVISED AND ENLARGED

By ROBERT PYLE, President

THE CONARD & JONES CO.
WEST GROVE, PA.

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THIS little book is designed to help the reader realize that by setting out the right plants of the right sort of roses this spring, cut-flowers may be had from these selfsame plants during the last days of May, with a continuity of bloom almost unbroken until the frosts of late autumn herald the approaching winter.

Amateurs are now able to have an all-summer "feast of roses," as well as the skilled professional, and it is the amateur's rose-garden, especially, that we have had in mind when writing the following pages.

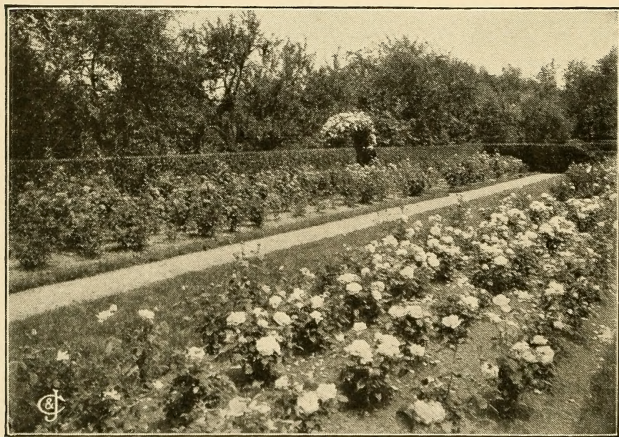
A large garden is not requisite. Two or three dozen good plants, of the modern and greatly improved sorts, properly selected, will give much enjoyment; while a garden of roses with somewhat greater variety and extent can readily be made a summer-long delight.

In spring, one can have the pleasure of building air-castles about the plants. When the warm days of June arrive, these air-castles will have taken substantial form, and you may go from one plant to another, giving each a little daily attention, contrasting one proud beauty with another equally queenly, and, best of all, gathering an abundance of lovely roses. Half an hour of such tonic-toil each day is a great nerve-restorer, and, what many of those who have tried it realize, it is also food for the soul.

Rose-growing among amateurs in this country is yet in its infancy. In England, before the war, nearly everyone grew roses. Dazzling vistas of roses were to be seen in the

hedge-rows, along the country roads and lanes. Gardens were full of flowers, and each person seemed to be striving in friendly rivalry with his neighbor. Why was this extraordinary enthusiasm for the rose? Because it is without a peer among all the flowering plants. It presents nearly every floral shade, in combinations far more attractive than exotic orchids, and, above all, its delicious fragrance gives us the enjoyment of another sense—the crowning feature, in which no other flower can compete with it.

Since history was first written the rose has been associated with the most important events in the life of man. For centuries it has been fully recognized as the Queen of Flowers, honored alike by poet and king. Yet such varieties as Columbia, Duchess of Wellington, and Frau Karl Druschki, the ancients never knew! Why, then, should not you and yours share in the pleasures of the twentieth-century roses, to your own enjoyment and to the advantage of those around you? Just a little garden of these modern well-bred roses; just a little daily, loving care; just a little cost; and the result to you and your neighbors will be the glory of the Queen of Flowers.



The Glory of the Queen of Flowers

Establishing Ideals

First consider what kind of rose-garden you will plan. Roses seem to enjoy being arranged in countless ways. Will the first show of bloom to burst into view, as one approaches your home, be on your pergola, or arbor, or rose-covered summer-house? If none of these furnishes appropriate setting, probably your banks or fences will be clothed or beautified. A variety of types, shown on the following pages, is available, and choosing from these will become a delight.

Perhaps your fancy may picture prosperous beds, abounding in a wealth of bloom, to be seen across a sweep of level lawn, or from your favorite room in the house, or even hidden beyond the curve in your garden-walk.

The formal rose-garden, too, is important, especially on the larger place. There are excellent reasons why the rose-garden should have a domain all its own. These fastidious creatures that so well repay your thoughtful care may well be grouped and with greater resulting effectiveness. In no other case, perhaps, does careful planning pay so well as in the formal garden.

In these brief suggestions of rose-garden possibilities let us recall vividly the value of the rose in the landscape. Here again a knowledge of varieties is important. Landscape architects are recognizing more and more the noteworthy species which are valuable in mass-plantings for showy effects, for retaining embankments, for bordering driveways, or even for certain types of hedges.

Or you may wish most for a garden of roses from which to cut bouquets, so that "the Glory of the Garden" may be reflected in your home. "Good taste" will suggest the right roses—one for this vase, a bunch for that bowl, a spray for the guest-room, still others for the hallway or the dining-room table, then surely some for boutonnieres, and at times for "state occasions." Surely anyone who has experienced the exquisite thrill welling up in the soul from the presence of choice roses well arranged will be eager to develop the skill needed to make the best use of Nature's garden-gifts.

The Rose-Lover's Calendar of Operations

These dates will be found relatively correct for the average season in the latitude of Philadelphia. If you live north or south, make the usual allowance of about four days for every 100 miles of latitude. Comparative altitude must also be taken into consideration. The seasons vary; for example, the ground may be in good condition and ready for digging as much as three weeks earlier one year than it will be the following spring.

March 15.—Such hardy roses as are already planted should now be pruned.

March 25 to 30.—As soon as the ground can be well worked, plant new hardy roses which are to be had dormant. Prune these even more closely than older established bushes.

April 10.—Less hardy roses, including the Everblooming class, should be pruned. Begin to remove the winter protection as the increasing heat of the sun permits.

April 15.—Roses are not immune from mildew and other fungoid contagious diseases; therefore it pays at this time to spray with bordeaux mixture all your rose plants as well as nearby fruit trees and grape-vines.

April 25 to 30.—Finish uncovering and pruning your roses. Plant new ones (now or until the middle of May). A slight shading of these from the sun will prove an advantage.

May 1 to 10.—As soon as plants are well set with foliage, a spraying with a solution of nicotine or sulpho-tobacco soap will act as a preventive against aphides (green fly).

May 20.—As soon as buds begin to swell, weak manure-water may be applied to the plants. Spray again to kill off the aphides, otherwise they will multiply with amazing speed.

May 25.—Now starts the season's procession of bloom, led by the sturdy Rugosas and the Yellow Briar roses. Start feeding the Hybrid Perpetual roses with liquid manure.

June 1.—With this month we see the true glory of the "Feast of Roses."

June 5.—Watch for the rose beetle and rose slug, and spray every ten days for three weeks with a half pound of arsenate of lead to ten gallons of water.

June 10.—Begin to nourish the Teas and Hybrid Teas with liquid manure. (Page 17.) You'll soon see the result.

June 20 to 30.—Now the Teas, Hybrid Teas, and Climbers begin blooming in abundance. Cut your blossoms freely. Look out for mildew and apply the remedy.

July 1.—Keep the soil well stirred. A dust mulch at this season is important.

July 4.—Gather all the flowers you can; it is not best for the plants to have them die on the bushes. You should now be reaping a full harvest from the Teas, Hybrid Teas, etc.

July 10.—From now till autumn keep a sharp lookout for signs of fungoid troubles—such as (1) mildew, (2) black spot, or (3) yellow leaf, and apply bordeaux mixture or sulphur arsenate dust mixture. If any aphides appear, use black-leaf 40.

July 15.—Thin out the old canes and trim back all multifloras and other climbers noted under chapter on pruning.

July 20.—Now or earlier mulch your roses with grass-cuttings, old manure, leaves, sawdust, or peat-moss.

August 30.—Teas and Hybrid Teas bring forth their "Fall Flower Show." As soon as the buds form, remember that Bon Arbor or manure-water applied to the roots will help them to produce the blossoms you'll be proud of.

September 10.—Some Hybrid Perpetuals bloom a second time.

October 15.—Make ready your new beds for next year.

November 15.—After the first frost, begin covering the stems of your roses, pages 26-27, and, soon after this, complete the protecting of the more tender kinds.

Thanksgiving Day.—As soon as the ground has frozen, all should be safely nestled in their winter beds.

WHEN YOUR ROSES ARE UNDER THE SNOW

December.—Read Dean Hole's "A Book About Roses." (Also, see Bibliography, page 105.)

January.—Send for the catalogs of a few reliable rose-growers.

February.—Order your new "Made in America" roses.



This shows how "York and Lancaster" may be used (page 62)



Rival Charmers—both radiate health and happiness

Where to Plant Roses

Several available spaces for the rose-bed are usually to be found on the average home-grounds. The author has had the good fortune to visit a number of rose-gardens that are famous—and others that deserve to be—and this may be said of nearly all: that they lay on the genial, sunny side of a generous group of trees or copse, but were open to the gentler breezes, and were not shut in or shaded.

When buying a new property, the selection of the most suitable spot upon it for the house is scarcely more important than the selection of a site for your rose-garden. You will choose a sunny room, if possible, for the indoor nursery, where “the little fairies” in your home may romp and play on a wintry day; and so, too, will you wish to provide for the happiness and well-being of your rose-children, because only a few of them are prairie-born. Only a small section of this large family has been reared to bear the rigors of gusty, sweeping or whipping winds at any time of year, and from such, for the best results, they must be protected. It is not only the severe, cold winds of winter, or the raw, cutting swish of spring, but the hot, withering winds of summer, too, that may ruin the opening buds and spoil the almost ripe fruits of your labor.

Choose a place, therefore, or establish one, protected either by trees, a hedge, a wall, a building, or by some other windbreak. Even a hedge of roses, or climbers, upon a substantial trellis will avail, although a more dense screen is more effective. Choose, too, a place where the sun will shine for not less than one-half of the day, preferably the morning. By this you will see that a space opening away to the south or southeast is to be preferred. We have noted equally successful rose-gardens entirely surrounded by hedges.

Avoid the too close shade of trees, or the proximity of tree-roots; they are ravenous robbers. If the roots can possibly reach over to your rose-beds, they will do it and steal away the nourishment you have provided. Therefore, either keep entirely away from them or, if you must dig your bed

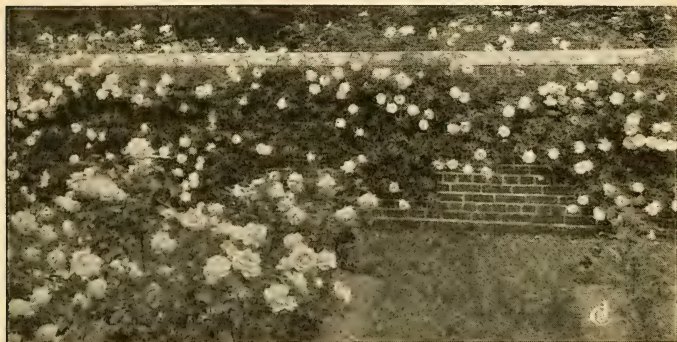
near them, put in a partition on the tree side to keep back the roots. Boards will do for a time; a concrete wall, about 4 inches thick, will last longer.

Another point to remember is that "roses do not like wet feet." They seem to resent the ignominy of being subjected to standing in undrained ground. Avoid very low ground for this reason, and also because it is more subject to early or late frost, and has greater tendency to mildew.

Try to combine in your choice as many of these conditions as possible, because, while no point is absolute, all are important. Don't stop or give up for the lack of some one of them. Be earnest about it, and you will soon provide the essentials. Mr. Chapman, the ornithologist, asked ex-President Roosevelt how he continually accomplished so much. Mr. Roosevelt answered that this had been his motto:

*"Do what you can, with what you have,
where you are."*

That motto will prove most useful for the rose-grower. It lacks, however, one essential, which has been expressed by no other so fittingly, in our estimation, as by Dean Hole: "He who would have beautiful roses in his garden must have beautiful roses in his heart. He must love them well and always. He must have not only the glowing admiration,



This is Gardenia, running in revelry over the garden-wall

the enthusiasm and the passion, but the tenderness, the thoughtfulness, the reverence, the watchfulness of love." The rosarian of beloved memory understood the secret. And would that we Americans had



Let climbing roses frame your garden pictures

more, like him, to spread the love for beautiful roses, as well as for the wholesome pastime of planting and caring for the Queen of Flowers.

"Make a picture of your lawn." This is the first principle of landscape-gardening. Leave open the center spaces and plant about and along the edges. Allow this rule to guide you, then select places for your roses where they will do best and give you the most pleasure.

Some varieties, as for example the Rugosas and the "rose species," serve a very useful purpose when planted among the shrubbery. Many other uses, too, are described on pages 64 to 76. The bush roses, however, including the Teas, Hybrid Teas, and Hybrid Perpetuals, will prove most satisfying if segregated and not mixed too much with other plants.

The location will help to decide the shape of your bed, and it is mainly a matter of taste as to whether it shall be straight, curved, oblong, round, or square. The essential point to remember is this: You will want *to get within arm's reach of every rose in your bed*, many times in a year, *without stepping on the bed*. Not over 5 feet in width and preferably 4½ feet, therefore, is a good rule to follow.

Arrange the roses 18 inches apart each way, unless they are very vigorous growers, in which case allow 2 feet for spread. In warm countries, where the growth is most



MME. CAROLINE TESTOUT is a royal Hybrid Tea Rose. It deserves its reputation for continuously providing large, rich, satiny pink flowers

luxuriant, and for the big bushy sorts, even more room will be required. Again, there is the other extreme as, for example, in making a border or edging of Polyantha roses, a fine continuous effect may be had by spacing them in the row at only 12 inches apart.

This diagram shows a bed 3 feet wide for two rows. A bed this width, "staggered,"

will require twelve roses to every 9 feet, twenty-four roses if 18 feet long, and larger beds in the same proportion.

The young garden in the picture below is well done. Note the avenue effect produced by the double row of Standard or Tree roses on either side of the walk, set from 4 to 10 feet apart. They remind one of the beautiful rose-gardens in England. Up the wall on either side climbing roses have been started. The front bed on the left in the picture is $4\frac{1}{2}$ feet square, and contains nine roses. The front bed on the right, if $4\frac{1}{2}$ feet wide by 6 feet long, would contain twelve roses. The rear bed on the right of the walk is $4\frac{1}{2}$ feet wide by 13 feet long, and contains twenty-four roses; and the long bed in the rear on the left, if $4\frac{1}{2}$ feet wide by 20 feet long, would contain thirty-six roses.



The formal garden is incomplete without roses

Preparing to Grow Roses

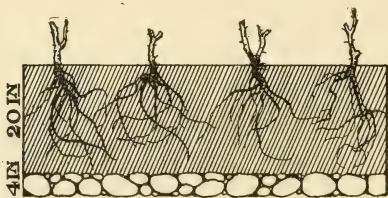
Having chosen the location and decided upon the size and shape of your beds, you are next ready to prepare the soil. Rev. F. Page Roberts, an ex-president of the National Rose Society of England, has said: "After years of rose-growing in places far apart, I think it is not so much the soil and the climate, as the *care and skill of the cultivator* that wins success."

A very successful grower of roses in New York State once remarked to a meeting of his rose society: "I would rather plant a 15-cent rose in a 50-cent hole than plant a 50-cent rose in a 15-cent hole." He was wise. The author recalls visiting a successful private rose-garden in New England one day when the roses in one bed were being moved. Those roses had well-developed roots 3 feet long, because the bed in which they were growing had been prepared to that depth, and the top-growth and bloom had been luxuriantly magnificent, testifying to the value of deep and thorough soil-preparation.

Drainage

One thing, however, must be provided, if you are to court success, that is *ample drainage*. "Wet feet" for roses are no more conducive to health and happiness than for children. Examine your soil; if there seems a need, provide drainage, and remove the soil from your bed to the very bottom. Place there a layer from 4 to 6 inches deep of stones not larger than your fist, broken bricks, clinkers, or other suitable material

that will readily "take" the water from above. The soil is seldom so retentive as to require tiling to take the water away and, indeed, nine times out of ten no artificial drainage at all will be needed.



Layers of stones like this are not essential if the ground is naturally well drained

Soils

The good loam so often found directly beneath the sod is excellent, but is greatly improved by being broken, even pulverized, to a depth of at least two spades and thoroughly mixed with about one-third its bulk of rotted manure. Fresh manure must never be allowed to touch the rose-roots. Indeed, the more thorough-going way is to make sure of the nether layer of soil by removing the upper one. First of all, peel off the sod (it will produce excellent compost, see section on "Fertilizers"); next take out the top layer of soil to the depth of 1 foot and pile it nearby. If the soil below that is good, rich loam, or a fair mixture of clay and loam, it may remain. Loosen this with a garden fork to a depth of another foot, preferably not upturning it, and mix with it well-decomposed manure, and then put back the top layer of loam in which to plant your roses.

If, on the other hand, you find the subsoil poor, barren, and unproductive, you may have to remove it altogether. Haul it away, and put your chopped-up sods in the bottom, grass-side down, to rot and make future plant-food. If you have ready from the previous year a compost made by mixing one-half or two-thirds of sod, with the balance of manure from the cow-stables, use it in the bottom of your bed, and make a future storehouse of rich nourishment for your roses.

Another hint: A few broken bones may be mixed with the soil in the bottom of the trench, say a peck for a bed holding a dozen roses. These will decay slowly, and furnish plant-food for three or four years to come.

Not all roses like the same soils. The Hybrid Perpetuals, for example, love a heavy clay or loam. So do the heavier-growing climbers; whereas the Teas, Hybrid Teas, Bourbons and the like, revel in a lighter soil and a warmer one, with less than 50 per cent clay or loam, and more sand or leaf-mold. Rugosas thrive even in quite sandy soil.

"It is difficult to give the roses too rich soil." If your soil is light and sandy, and you cannot well replace it entirely, it may be greatly improved by mixing a little clay or rich loam

with it when trenching. If your soil seems too heavy, it can be made lighter and more open by adding sand, or even coal-ashes: To be good for roses, the soil must be such as will not quickly transmit to the roots sudden surface changes of temperature. The roots should be kept cool. If it be possible after the soil in your bed has been prepared, give it time, say two or three months, to settle before planting your roses. If this be out of the question, press with your feet each layer of soil in your bed, as you proceed to fill it in.

Fertilizers

While manure from the cow-stable is best, you can draw upon the horse-stable, sheep-pens, or pig-sty with expectation of good results, and "night soil," mixed with dry soil, or sand, and well composted is excellent. Well-rotted leaves are fair, but too light except for heavy soils. Commercial fertilizers, such as ground bone or guano, may be used with advantage if handled with discretion. A rule to remember is never to let any "green" or "raw" manure come close to the roots of your roses, but see that it is buried well beneath the root reach, or applied as a top-dressing. After your roses have been planted, the best time to apply manures is just as the ground begins to freeze in the autumn. Let it serve as a protection over winter, and dig it in next spring, being careful, however, not to disturb the roots.

Far better than surface-coating is the ample supply of fertilizer placed well under the roots in the bottom of your beds, before you plant your roses, because roots travel toward their food-supply. By thus enticing them downward, you develop a strong, deep root-growth down into the reservoir of stored-up food and moisture, so that, when dry weather comes, they will not hunger and thirst, as they would with only surface roots. Surface application of manure-water is quite a different matter, as that will percolate down to the deepest roots.

It is said that roses draw most upon the soil when blooming, and we find you can almost see the results from application (when the flower-buds begin swelling) of liquid manure,



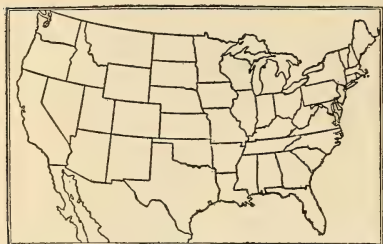
Nearly every child is fond of flowers

concocted by catching the drain from the manure-pile, or one-third of a bushel of manure in a bag and soaked in a barrel of water. Apply this as a weak tea, not too strong, but frequently, say twice a week. When it is more convenient, a sprinkling of bone-dust on the surface before a rain will answer the same purpose. Even with the best care, it may prove necessary in some locations, say after six or eight years, to renew the roses or move the bed, adopting the farmer's principle of rotation of crops.

When to Plant

Tell us *where* you would grow roses, and we will tell you when to plant them. The most carefully laid down dates for New York State are "null and void" in New Orleans. Proper planting-time in the same state may vary according to differ-

ences in altitude and latitude. Where the winters are not too severe, as in our Gulf and Pacific Coast States, and the



next tier of states north, autumn-planting is to be preferred.

North of the line of the Ohio River, only our hardier varieties, such, for example, as the Hardy Climbers and Hybrid Perpetuals, Rugosas, Moss and Pernet-

ianas, will withstand the first winter out, if autumn-planted.

As a matter of general practice, there are, doubtless, ten times as many roses planted in spring as in autumn. For the latitude of Philadelphia, dormant roses should be planted as soon in spring as the soil is dry enough to crumble in the hand, and plantings may continue till mid-April. Growing roses from pots should not be set out until danger from frost is past, usually the last week in April. If you live north of 40 degrees latitude, defer planting from this date by one week for every hundred miles. Do not attempt any planting operations with the ground frozen, or the thermometer below 45 degrees Fahr. Roses from pots, when shipped with soil on the roots, may be planted at any time through the growing season, even during the summer.

Treatment on Arrival

Think of your roses as living creatures, even though they be asleep (dormant) when you first get them. Unwrap them with the greatest care; never expose the roots to the drying action of the spring winds for a moment. A plant with bare roots exposed to the dry air is like a fish out of water. Untie the bundles so as not to break, bark or bruise either root or branch. Should the plants, through delay in transit, come dried out, as occasionally happens, soak the balls of earth and roots in water; if the stems also have dried out, bury the whole plant in damp earth for three or four days till the



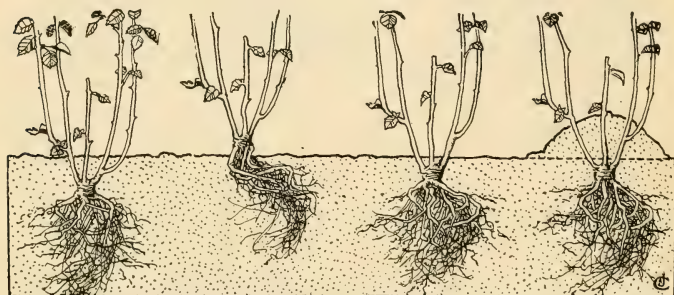
When this little girl grows up and has a garden of her own, she too will know how to grow fine roses.

shriveled branches regain their natural plumpness. If you cannot plant the roses when they arrive, "heel them in" in the garden until you are ready to plant them. This is done by digging a trench deep enough thoroughly to cover all roots and even lower branches of each bundle of roses. It will be better to untie the bundles so that the roots can be more thoroughly covered. Press down this soil-cover firmly.

Planting

When ready to plant, remember again that roots must be kept from the wind. Spring winds are so drying that fatal damage may occur from a few minutes of exposure. The best plan, when planting, is to keep the roots covered with a damp piece of burlap, or of other packing-material.

Next make the holes in the bed, which should have been prepared as shown on page 15, and make them large enough to accommodate the roots in a natural and uncramped position, neither too deep nor too shallow (see illustration). Do not spread the roots out flat, but point them down, slanting outward. Use care to keep the roots from direct contact with the manure, lest the roses get indigestion. It is a good plan to dip the roots, before planting, in a thin mud made by mixing loam or clay with water. Settle well-pulverized soil in around the roots, so as to fill up every air-space, and so that every single root shall be entirely encased in soil. When the hole is half-filled, and roots covered, press the soil down firmly with the hands; then fill the hole with water, and let it drain away; fill in level with soil, and tamp it carefully but securely; then give a final covering of soil, which should be about level with the surrounding turf, but not high enough to let the water run away when it rains. Also protect from the bright sunshine for a few days.



Too deep

Too shallow, and
set wrong

Just right

Right, and banked
for winter



For splendor, beauty and impressiveness the red Rose stands preëminent, and among the Hybrid Perpetuals the J. B. CLARK, shown above, is a variety with real merit.

Among the more recent introductions in this class should also be mentioned Hugh Dickson, George Dickson and Gloire de Chedane Guinoisseau.

Can you imagine any flower more exquisitely appropriate, either worn singly or in display for the most important occasions, than a freshly opened bloom like the above?

Important celebrations and state occasions are coming more and more to depend upon the Rose for its decorative value, satisfying the mind and heart, as well as the eyes, of all observers.

Staking the Roses

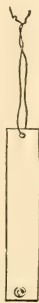
Standard or Tree roses, unless extraordinarily sturdy and planted where they are protected from the winds, will be the better for staking. The stake should come well up to the head of the rose. Place it while planting, for if it is driven later it may injure an important root. Bush roses seldom need staking when planted, although this is a matter for attention according to the needs of individual varieties. Plants should never be permitted to sway about or become loose at the collar. If the sun be warm within the next day or two after you plant, the bush will be the better for being shaded, as well as for mulch about the roots.

Labeling

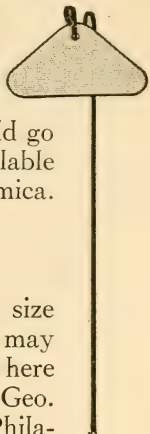
Rose-growing with labels is by far the most delightful kind. You lose half the pleasure if you lose the names, to say nothing about the satisfaction of accumulating information. The importance of labeling is really great. Do it when you plant as a part of the operation; otherwise, it is likely to be overlooked. The growers' labels are not likely to last more than one season, and then it becomes dreadfully embarrassing not to know what to call your plant-children, whether you want to scold or caress them. Choose the label with fewest faults.

Copper Labels

These are made of light sheet copper, eyeleted and wired ready to use as soon as the name of the plant is inscribed. The copper labels are very light, and are therefore most suitable for hanging on the branches of your roses in a conspicuous place, not to be disturbed until you begin your pruning. Then, if necessary, remove them to some other part of the plant not in danger from your shears. But any type of label that must be wired on the bush may constrict and check the life of the stem or branch on which it hangs. Therefore, a better way



to use these copper labels is to suspend them on a stout wire stake alongside the plant, so that no removing will be necessary unless the rose is being transplanted to some other part of your garden, when, of course, the label should go along with it. This shape of label is now available in celluloid faced with perfectly transparent mica. (See right-hand cut at bottom of page 22.)

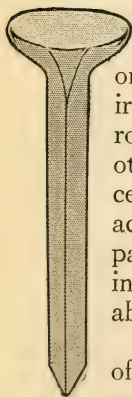


Garden
Club Label

Plain or Printed Wooden Labels

Plain or printed wooden labels, similar in size and shape to the two illustrated on page 22, may be attached to an upright iron stake (such as is here shown). This is the scheme followed by Capt. Geo. C. Thomas in his noteworthy garden near Philadelphia. Furthermore, upon the same stake, with the name label, he hangs a plain wooden label which is used throughout the season on which to mark the number of roses harvested from that bush each time one or more is cut. Such a plan, faithfully followed, makes an invaluable record for any careful rose-grower.

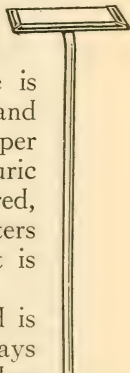
The best of wooden labels must be sometimes renewed.



Mann
Label

A more permanent type we call the Garden Club Label. It is a triangular piece of flat zinc with rounded corners, hung on the gooseneck top of No. 9 galvanized iron wire, 15 inches long, as above. There is room on the reverse side for date of planting and other data. For indelible ink, dissolve a copper cent in a 1-ounce solution of one part sulphuric acid and five parts water; or, if preferred, paint the label and stake green and the letters in white. This label keeps clean because it is above the mud-splash of the raindrops.

The Mann Plant Label hereby illustrated is of zinc. It is practically indestructible and stays put. The size is $9\frac{1}{2}$ inches long by $3\frac{1}{4}$ inches across at the top.



Simplex
Label

The Simplex Labels illustrated on page 23 are a single piece of metal frame and stake 16 inches long and securely hold in place a slightly roughened celluloid card which is protected from the weather by a clear, smooth cover of mica.

Celluloid labels, with the rose name printed in and clearly showing from beneath a transparent glazed surface, are perhaps the most recent development and promise great satisfaction.

The most elite rose labels we have ever seen were those used by M. Gravereaux, at L'Hay, near Paris, where, on top of small, sturdy, iron stakes, were bolted beautifully finished, flat top, oval name-plates of porcelain.

Plotting

But the "best laid" labels sometimes go wrong, and in some unexplainable fashion do get lost; therefore, to be entirely protected, you can take out label insurance. Some people think this is more important than labeling. Draw a diagram of your bed, and then with letters or numbers indicate on it the location of each rose. With this make out and keep a key-list of roses lettered or numbered to correspond with those on the diagram. We venture to predict that such a list will prove its value before the end of the second year.

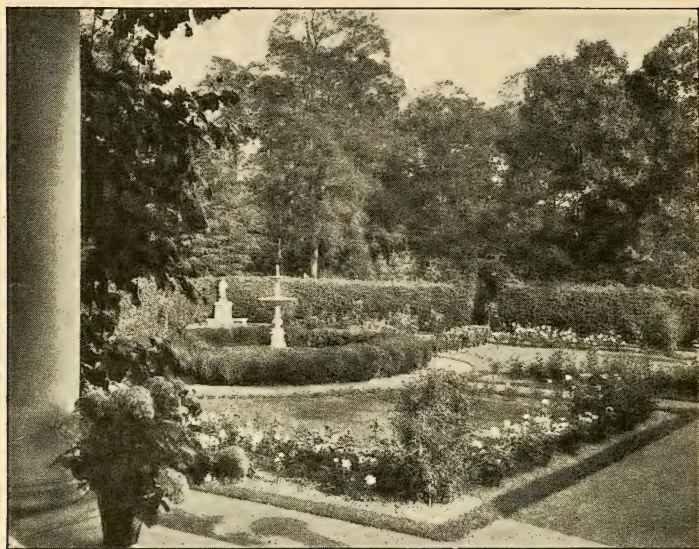


Mulching

There is a treble object in this: First, to retain the moisture; second, better to preserve a suitable temperature in the soil; third, to stop weed-growth. What is called a "dust-mulch," maintained by frequent hoeing, is, perhaps, the best method, although, where the summers are warm, a covering in early July of long "strawy" cow-, pig-, or horse-stable manure that will not heat, will accomplish the same object. The lighter and more chaff-like portion should be removed in the spring and the richer part dug in. Peat-moss we look upon as even better than a manure-mulch, because the latter may encourage root-growth nearer the surface than is desirable. We have also tried sawdust for covering the beds in summer. It certainly prevented need for weeding and otherwise seemed beneficial. Another plan is to plant some low-growing and shallow-rooting ground-cover plant, like violas (pansies) or portulacas. These grow quickly from seed and should be established by mid-July.



Roses where everyone may enjoy them



Roses in the outdoor living-room

Protecting the Roses

From Frost

W. C. Egan, the eminent horticulturist of northern Illinois, succeeds admirably in keeping his roses over winter, as does also the Superintendent of the McCormick estate; and yet, north of Chicago, where they live, the severe winters and the cold winds blowing over Lake Michigan, often kill the Wichuraianas and Rambler roses to within a foot of the ground, when not protected. An eminent judge, living north of Detroit, by the work of his own hands, protects his Hybrid Teas so that they triumphantly weather zero winters. On the famous shore-front at Newport, Rhode Island, we found the tender Gloire de Dijon rose, which we had supposed could not be grown north of Washington, D. C., green and thrifty to the second story, after a most severe winter season. But the protection had been very thorough.

Obviously, there is no danger where there is no frost. Where the thermometer falls below freezing, the less hardy varieties should be partly covered, and all roses will be the better for some protection, at least about the roots. If you are visited with zero weather, let "*preparedness*" be your rule. To begin with, bank up the soil cone-shaped, with the apex 6 to 10 inches high around the stem of each bush. Ashes are sometimes used, but nothing we know of is better than soil. In very cold countries, the roses may be lifted entirely and buried in trenches for the winter, and they will come out in fine shape for replanting in spring. After you have drawn the soil nicely around them (see calendar), leave them alone till the ground is frozen with a crust hard enough to bear the weight of a stone-laden wheel-barrow. By this time the moles or mice, or other creatures, will have secured their winter abode elsewhere, and not be tempted to make nests in the protecting material you will next apply. Now do not smother your roses, or they may die. Cover them thoroughly, as high up as you attempt to protect them, but always allow for the circulation of air. A 3- or 4-inch blanket of good, heavy stable-manure will keep out much cold. Over this fill up from the bottom of the bed to a depth of 10 or 12 inches with nice, dry leaves, and with some light material on top to keep them in place. A 12-inch fence of poultry-wire staked round the bed will help keep the leaves in place. The boughs of fir or pine trees, hay, straw, or cornfodder, or other material that will break the force of cold, biting winds, will serve in place of leaves, and where most careful protection is required, boards may be arranged roof-fashioned to turn off the rains. This will also protect your roses from exposure to direct sunshine when nights are freezing-cold, and avoid alternate thawing and freezing, which is dangerous, and in early spring prevent the premature excitation of plant-growth and tender buds. For this reason, too, remove protection in spring gradually, and not all at one time (see calendar, page 6).

A method that has proved successful in one of the coldest sections of the United States is thus vividly described:



Minneapolis Municipal Rose-garden

“ . . . Our principal problem would be to provide proper winter-protection. We took special pains to ripen the wood. We stopped watering and cultivation in September, and discouraged late growth. The last week in October we gave the beds a very thorough soaking, and a few days after we tied the shoots close together, and piled the soil around the plants as high as we could with material taken from between the plants, so covering from four to six of the lower eyes. The garden was then left in this condition until there were 3 or 4 inches of frost in the ground. We then filled in with dry leaves, gathered from the nearby woods. The leaves were thrown in loose and not packed down, and covered the beds to the height of the soil heaped around the plant. We then boarded in the long sides of the beds 2 feet high, and boarded over the top of the bed, but left the two ends open. Over this board cover we spread a layer of bedding, straw and hay.

"It will be seen by the method of winter-protection herein described that our aim was to prevent, if possible, thawing after frost had set in; to protect the plants from the drying effects of the strong winds, without preventing the free circulation of air. We have employed the same method of protection ever since, and generally we have been successful in bringing the plants through winter in very good condition." (Article, "The Minneapolis Municipal Rose-garden in Lyndale Park," by Theodore Wirth, in "The American Rose Annual," 1916, pages 79, 80.)

Protecting Tree roses over winter is most important. Set up a box about 2 feet square, and high enough from the ground to encase the head, and fill this with soil to cover all but the topmost branches. No part needs protection more than the point where stock and branches join. Another method is to loosen the earth on two sides of the plants so they may easily be bent over without breaking anything and then, when staked to the ground, cover with 6, 8 or more inches of earth till danger of frost is past in spring, when they may again be reinstated and restaked. In some locations it may prove quite as convenient, and equally effective, to take up the plants entire, and bury them in a trench in the vegetable garden.

Protecting Roses from Enemies

Eternal vigilance is the price of perfect flowers, because "prevention is better than cure." Vigorous, healthy plants are seldom troubled much.

The two golden rules to remember, says Mr. Edward Mawley, one-time President of the National Rose Society of England, are these: "Keep sharp watch out for the first appearance of insect or fungoid pests and adopt measures for destruction at once. Then persevere with the remedy adopted until a cure has been effected."

Our Lady Rosa likes cleanliness above all things, and will respond generously to these attentions. Keep your roses clean and healthy and they are almost certain to be happy.

The beginner need not be dismayed at the array of troubles that may happen; if they do, these hints are offered as a "first aid." As a matter of fact, not all the pests are likely to appear in the same garden. Rose-growing is not so complicated or difficult as might appear.

Insects

Probably our worst enemy to roses is the ROSE CHAFER ("Rose Bug"), which is particularly severe on sandy soils. For this, handpicking into a vessel of kerosene is effective, or, as a preventive, spray every two weeks through June and July with bordeaux mixture (1 ounce to 1½ gallons of water) or a solution of ½ pound of arsenate of lead in 12 gallons of water. This is also a good remedy for the ROSE-SLUG, which skeletonizes the leaves. It works from the under side of the foliage so when going after it, turn the foliage down side up and spray it thoroughly.

APHIDES, or GREEN FLIES, attack the plants during May and June, and, if not dispatched, they multiply rapidly, and suck the life-blood from the leaves. A vigorous spraying of black-leaf 40 or whale-oil soap will settle them. SCALE seldom bothers any except old, neglected shrub roses. Use scalecide or lime-sulphur wash.

Diseases

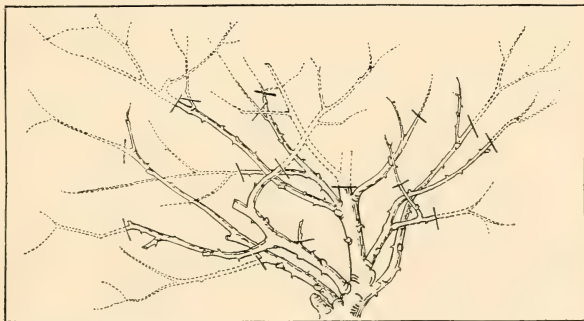
Of the fungous diseases, POWDERY MILDEW is by far the worst and most difficult to overcome. It will be recognized as a white mold appearing on the foliage, which, if not checked, will spread.

This is most likely to occur in warm, damp weather, and certain varieties, such as Crimson Ramblers, are more subject to its attacks. Bordeaux mixture, applied at fortnightly intervals, is a good preventive (see formula above). Even better, use *sulphur arsenate dust mixture*. Formula: Nine parts finely powdered sulphur to one part arsenate of lead. Apply with a dust gun. For BLACK-SPOT, RUST, and other fungous diseases, follow the same course. Also promptly remove and burn foliage thus affected.

Pruning

If you have bought two- or three-year-old plants, cut them back rather severely at the time of planting—to three or four buds on the Hybrid Perpetuals and about six on the Teas and Hybrid Teas. Always cut the stem just above a bud that points out, never above one that points toward the center of the plant. The term bud or eye is used to define the places on the stem where leaves will be produced. They are easily distinguished, as they look like small, pointed warts on the stems. If the plants are in leaf when planted, the above does not apply. The crop of flowers on the rose plants is largely governed by the kind of pruning the plants receive. In fact, other conditions being ideal, the pruning determines the quantity and the size of the flowers.

The Hybrid Perpetuals and most other hardy roses should be pruned in March; if weather permits, by the



Method of pruning Hybrid Teas for garden display
(As recommended by the N. R. S. of England)

middle of the month. The tender roses, the Teas and Hybrids Teas, need not be pruned until along in April, when the sap begins to flow and the buds begin to swell; for, at this time, dead and weak wood may be much more easily distinguished and cut out than earlier in the season. Besides, it is an advantage to leave the mulch undisturbed until settled weather has arrived. At the time of pruning, one must



The PERLE DES JARDINS is a standard Tea Rose of rich golden yellow color and fine form; it blooms freely on strong stems. Other newer Roses of related color and great merit are Lady Hillingdon and Alexander Hill Gray.

decide upon the kind of crop wanted. If the very biggest and best flowers are wanted, severe pruning is necessary (see 1, page 34); if a large crop of average flowers, only moderate pruning (see 2, page 34); but, where a quantity of bloom is preferred, only a little pruning is necessary (see 3, page 34).

When pruning Hybrid Perpetuals, first cut out the weak wood and any branches that cross; then cut back the strong canes to about six eyes, the top one pointing out, and the cut being made one-quarter of an inch above the bud. If you want only a few big flowers, cut back to only three or four buds. For the big outdoor display, leave four to seven canes two-thirds their growth. The Teas and Hybrid Teas will need the same attention, but there should be as much or more wood left. In case the winter may have killed the canes, cut back to live wood, even if down to the surface of the soil.

These rules are modified somewhat by the character of the plant. *The weaker-growing varieties can be cut back farther than strong-growing sorts.* The strong-growing kinds, if cut back too heavily, will run to wood, and, in the case of some, too heavy pruning may kill the plant.

Austrian Briar roses (also the Bourbons) need very little pruning. The Wichuraianas and many of the Multifloras bloom on the branches produced the previous summer; hence these should be pruned very little during autumn or spring; but when they have finished blooming entirely remove the old flowering shoots to give the new growth plenty of light and air.

Climbing and Pillar roses need be cut back but one-third to one-fifth, and on old, well-established plants, the old, enfeebled wood should also be taken out.

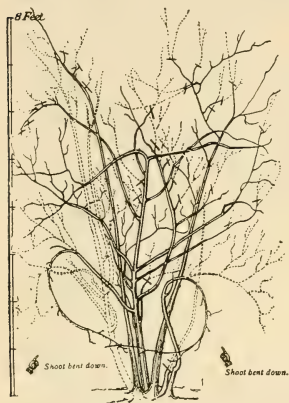
The base of the branches may be prevented from becoming bare. In straight branches, the sap goes to the top, leaving



Showing where to
prune

little for the buds at the base. Train the branches up crooked by putting sharp bends in the stems within 2 feet of the ground, and foliage will be produced the whole length of the stem. To get a second crop of flowers in autumn, cut 8 to 10 inches of wood with the flowers. Several Hybrid Perpetuals will also bloom in autumn with this treatment. (See below, and also the list of 162 roses on pages 43 to 62.)

In autumn extra-long canes will need to be cut back a little, and perhaps tied to a stake or support, to prevent swaying and the consequent damage to the roots.



The way to prune and thin out climbing roses

How to Use This Pruning Information

Refer to pages 43 to 62 for varieties on which information is desired. Opposite each name will be found abbreviated directions for pruning. Illustrations herewith

will further explain the instructions. The key to these directions is fully explained on this and the succeeding page.

1. **HARD.** Thin out to the base all but from three to five shoots, and cut these back so as to leave two or three eyes on each shoot.

2. **MODERATELY HARD.** Thin out as No. 1, and cut each shoot back to about five to ten eyes.

3. **MEDIUM.** Thin out as No. 1; leave four to seven shoots; shorten these shoots to about half their length.

4. **SPARINGLY.** Thin out as No. 1; leave four to seven shoots, which should be merely tipped.

5. **THIN.** No pruning required; thin out annually.

6. **NONE.** No pruning required; thin out every two or three years, just to keep the plant within bounds.

7. **Climbing, Pillar, and all other roses that are marked 7** can be improved by thinning, when one or more of the

stems show plainly that they are old and past doing good service. This should not be necessary oftener than every three years. Kinds marked + are more likely to need it than kinds marked —. The needs of such roses as Mrs. Peary, Marechal Niel, etc., are not covered by any of the notes, where the climate is warm enough not to kill back the main stems. In this case, the branches should be trimmed so as to leave from two to ten eyes.

Ex. Method to use to produce exhibition specimens or large flowers.

Q. Method to use to produce showy bushes or a quantity of flowers.

“NOTE 1.—Pruning, therefore, is the art of improving the productive power, and the appearance of the plant. It consists of two distinct operations: (1) The removal of dead, weak, overcrowded, or otherwise useless shoots. Unripe wood which in the spring will usually be found to have discolored pith, caused by the winter frosts, should be cut clean away at the base of the shoot. (2) Pruning proper, the shortening of those shoots which are allowed to remain after the thinning-out process has been completed.

“The most frequent errors made in pruning are (1) leaving too many shoots when thinning out; (2) pruning severely the shoots of varieties which require little, if any, shortening; (3) pruning lightly the varieties which require severe pruning; (4) leaving rose plants crowded with shoots and cutting these to a uniform length all over the plant in the same way that a hedge is clipped.

“In thinning out a shoot, it should be either cut clean away to the base of the plant, or to its starting-point on the older shoot from which it springs, as the case may be. When the plant has been pruned, the shoots should be left as nearly as possible equidistant from each other, and regularly arranged around it so that it presents a well-balanced appearance on all sides.”—*National Rose Society's Hand-Book on Pruning*.

Copies of this valuable book may be purchased on application to Editor “How to Grow Roses,” West Grove, Pa.

Own-Root, and Budded or Grafted Roses

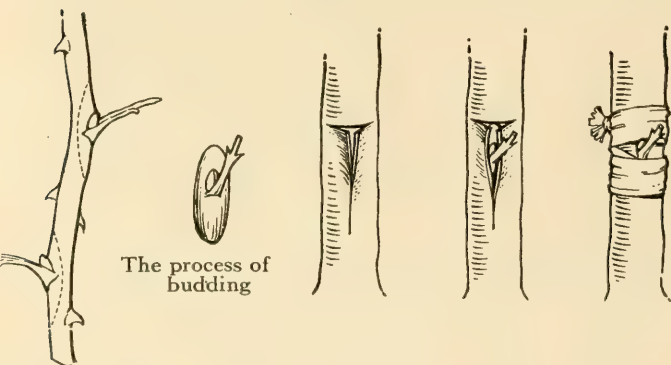
Every rose-grower should learn the difference. In a budded or grafted rose, the top of a good flowering variety has been joined and made to grow upon the root of a "wild" rose. An own-root rose stands on its own feet, so that, if the top be winter-killed, the new growth from the root will bloom true as at first. Not so with the budded or grafted rose. If the top be killed, the "wild" root is worthless; throw it out.

As a general rule, for application over a broad area, the experience of many people in many different localities indicates a preference for own-root roses only in such varieties as will make vigorous growth.

Some types, however, especially some of the Hybrid Teas, when on their own roots produce but poorly. In order to obtain vigorous growth and luxuriant bloom, such kinds are budded or grafted upon the stock of a strong-growing rose. Multiflora, Canina, Manetti, and other stocks are used for this purpose. When planting own-root roses, set in the soil a trifle deeper than the stain of the soil on the stem indicates it grew before. *When planting budded or grafted roses, set with the joint or union of top and root an inch below the surface of the soil, and watch for suckers.* If there appears any growth originating below the union, dig away the soil and cut it off close up to the stem; otherwise it may grow up and crowd out the flower-bearing part of the plant.



A budded rose may be distinguished from the own-root by knot-formation of the former. See arrow.



The process of budding

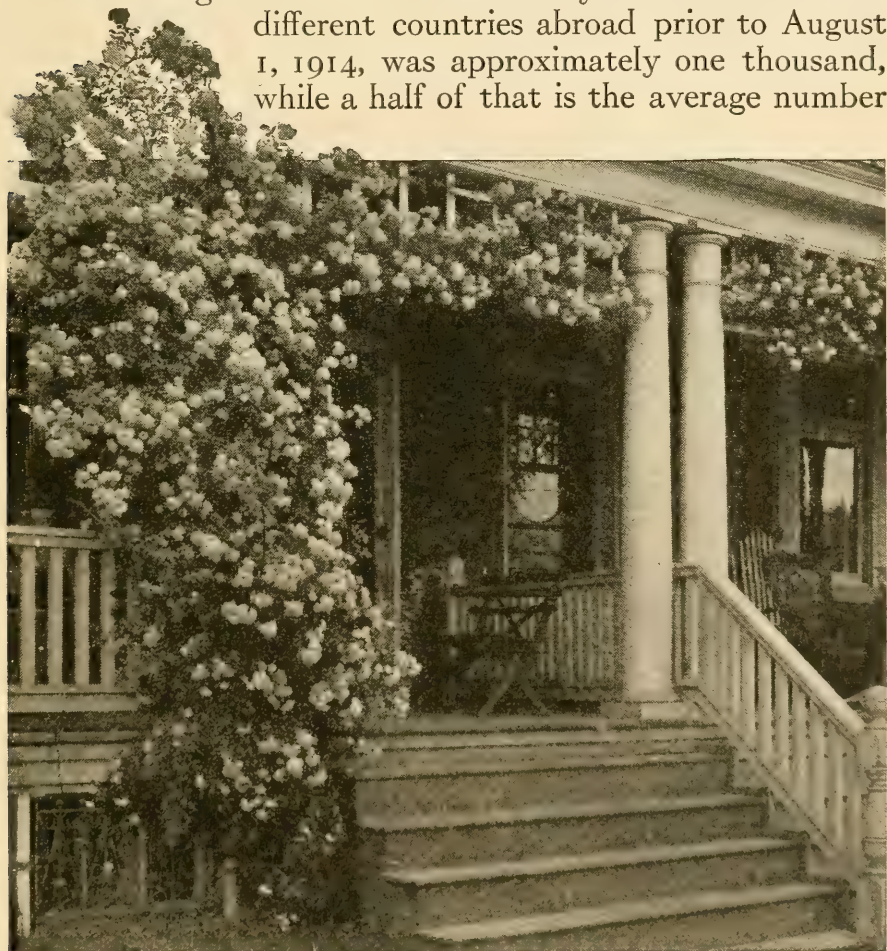
Suckers show 7 or 9 leaflets.

The majority of roses grown and planted North are budded; South the reverse is true.

Selecting the Roses

This is a vital matter. The most complete and authoritative list of roses in our possession shows 10,281 varieties. The most complete collection in any one plantation that has come under our observation we did not attempt to count. It is said to contain about six thousand varieties, including every known species and every variety now obtainable in the civilized world. (This garden, the Roseaie de L'Hay, will be found more fully described on page 98.)

The average number of roses actually in commerce in the different countries abroad prior to August 1, 1914, was approximately one thousand, while a half of that is the average number



The luxuriant clusters of the white-flowered Dorothy Perkins. A good example of the Wichuraiana family

offered in America by the leading rose firms whose products can be relied upon as true to name.

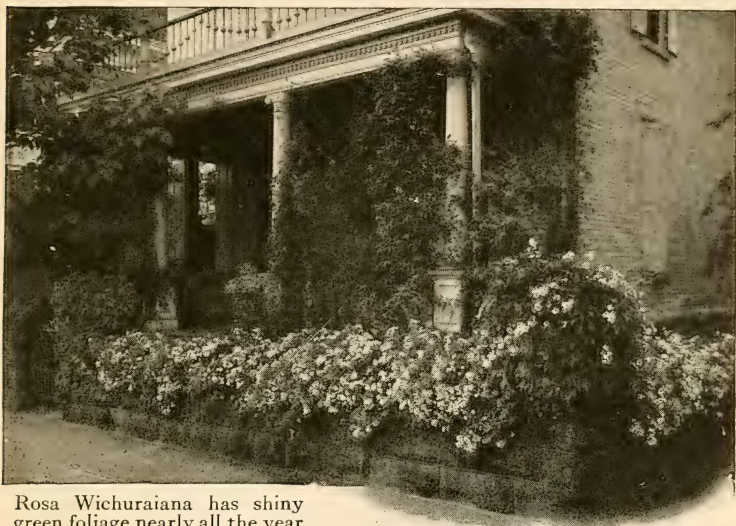
When we recall that the average amateur must confine his selection to a much smaller number even than this, often a choice two dozen kinds, the paramount importance of a proper selection is quite apparent.

Dr. Liberty H. Bailey, formerly of Cornell University, and editor of that standard authority, "Cyclopedia of American Horticulture," says: "The success of the rose in this country is very largely a question of the selection of adaptable varieties."

Pemberton, in his excellent work on "Roses," says to beginners: "State your requirements to a *friend* who is an *expert* and leave the selection to him." This book would be a "friend" to every rose-grower,—how "expert" you must judge from its contents.

America is a big country, and allowances must be made for differences in soil, climate, and other conditions. Rules are offered for use and application by the reader to the conditions that obtain in his or her locality. If there arise conditions not herein covered, the author will be glad from his own experience to assist readers in solving their individual problems.

Where do you live? The answer to this question is the first key to the selection of the right roses. Some varieties will withstand severely cold winters from which other varieties would die. Do you want dwarf, bedding, pillar, or vigorous climbing roses? Would you prefer a great show for a month or more in the early summer, or a more or less continuous bloom throughout the autumn also? These various important characteristics will be mentioned in the descriptions of 162 roses on pages 43 to 62. The following explanations will enable you more fully to understand the terms used. We state after the name of each rose: (1) the class to which it belongs; (2) the color of the flower; (3) the character of the leaves, when it is particularly worthy of mention; (4) the character of growth (vigorous, moderate, etc.); (5) the purposes for which best suited; (6) the way to prune



Rosa Wichuraiana has shiny green foliage nearly all the year

the variety; (7) other noteworthy remarks. We have endeavored to avoid all exaggeration.

After the name of the variety, the class to which it belongs is indicated by the following abbreviations:

SECTION I

T.—Tea
Bou.—Bourbon
C.—China
H.T.—Hybrid Tea
P.—Polyantha
T.P.—Tea Polyantha

SECTION II

N.—Noisettes
C.T.—Climbing Tea
C.H.T.—Climbing Hybrid Tea
C.P.—Climbing Polyantha
C.T.P.—Climbing Tea Polyantha

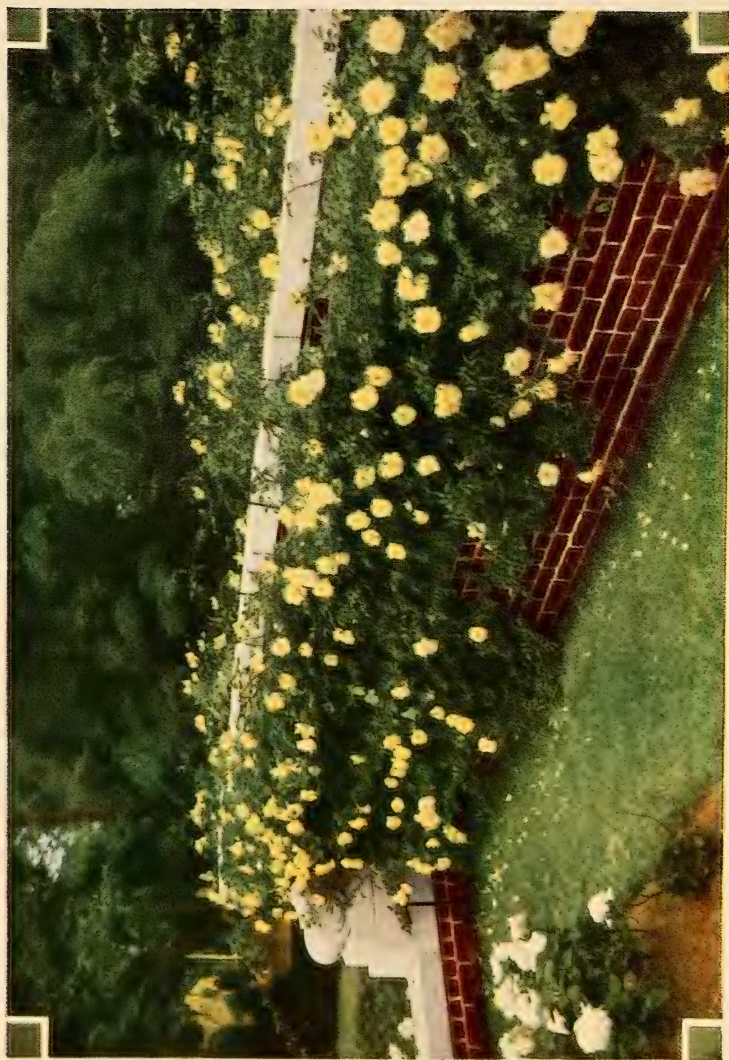
SECTION III

A.B.—Austrian Briar. Per.—
Pernetiana, or Hybrid Austrian
Briar
D.—Damask
H.P.—Hybrid Perpetual
M.—Moss
Pr.—Provence
R.—Rugosa and Hybrid Rugosa

SECTION IV

Mult.—Multiflora
Bank.—Banksian
Cl. M.—Climbing Moss
S.B.—Sweetbriars
W.—Wichuraiana and hybrids

In addition to 162 leading roses listed on pages 43 to 62 inclusive, see also (pages 110 to 115) a list of the important roses in each class named above.



"Over the garden wall" is only one of many places where most effective use may be made of a Yellow Hardy Climbing Rose. There are others, but none finer than GARDENIA, or "Hardy Marechal Niel," as shown above.

It will be helpful to remember, when referring to the above four sections, that sections III and IV contain the hardiest roses. Roses in these classes will live out over winter in the latitude of Philadelphia without protection, although all roses in this and colder regions will be the better for protection. The classes in sections I and II require careful protection in a climate like this, especially the first ones named in each section, which are better suited for growing south of Washington, D. C., and in correspondingly mild climates.

As to bloom, sections I and II will bloom more or less throughout the growing season. Sections III and IV are mostly known as summer bloomers, and are in their greatest glory for only a few weeks in early summer. Some of the Hybrid Perpetuals and Hybrid Austrian Briars will also make an autumn showing.

The character of growth is indicated upon a scale arranged as follows: Weak, moderate, moderately vigorous, vigorous, very vigorous; "robust" indicates sturdy and bushy, but short growth. Climbers are described either as vigorous climbers, suitable for low pillar or trellis, or very vigorous, suitable for archways, pergolas, or high trellis.

Terms Used to Describe Appropriate Uses

(Also key to descriptions on pages 43 to 62)

GARDEN.—Recommended for general lawn or garden cultivation.

BEDDING, i. e., free-flowering and of rather compact growth—good for massing in beds, either several of a kind or with other bedding roses.

PILLAR.—Excellent for training up to a low pillar, stake, or post.

ARCH.—For covering an archway.

PERGOLA.—For growing over a pergola.

WALL.—Suitable for training up the face of a wall or side of a building.

CREEPING.—Good for covering a bank, stumps, rocks, etc.

TRELLIS.—Grows well on a trellis or support.

BUSH.—Makes a good bush when planted alone and allowed to develop.

POT, or CUT-FLOWERS.—Those that have particularly long stems and other qualities that make them peculiarly fitted for cutting. Good also under glass.

BOUTONNIERE.—Well-formed buds and not so large but that it is appropriate for a buttonhole or corsage bouquet.

EDGING.—Makes an excellent edging to a rose-bed or border, bed, or pathway.

HEDGE.—Adapted for making a hedge, either all one kind or with others.

TREE or STANDARD.—Kinds that do well in tree form, as illustrated on page 98.

Note also at the close of this chapter a section devoted to the best roses for each particular purpose in your garden. We feel that entire dependence may be placed upon these recommendations beginning page 64, based upon the information gained after many years' correspondence with patrons in all parts of the United States.

In a broader way the reader will surely find great interest in cultivating a more intimate acquaintance with this great rose family. Opportunity for further study of this subject is offered in the Analysis of Species and outline of different classes beginning on pages 108 and 110.

Following these sets for special purposes, and beginning on page 77, will be found recommendations of the varieties that eminent amateurs, or professionals, have found best adapted to each of eight different typical sections of our country.

But comparatively few people can actually plant more than a small proportion of any such extended list, and therefore we list on the pages immediately following a shorter list of the leading varieties from any of which it will be entirely safe to select. The reader may still have some failures, but they will serve as stepping stones of knowledge surely learned on which to build greater success.



American Pillar
See page 44



A Baby Rambler
See page 44



Anna de Diesbach
See page 44

One Hundred and Sixty-two Choice Roses

Loving roses as we do; living among them and watching them closely and constantly, under all sorts of conditions; having before us reports upon roses from every country on earth to which our roses go, and knowing, too, the prize-winners and kinds that have pleased amateurs here and almost everywhere; watching the new roses as they "come out," testing all kinds and holding fast to those which are good,—out of an experience like that has come our choice of these 162 roses. See abbreviations for class, growth, purpose, and pruning, explained on pages 39 to 42.

AGNES EMILY CARMAN. H.R. Flowers brilliant crimson, velvety; very fragrant. Hedge, bush. Perfectly hardy. Prune 5, 7+.

ALBERIC BARBIER. H.W. Flowers in clusters, double, creamy white with canary-yellow center; fragrant. Leaves bronzy red in spring and glossy; almost evergreen, and not liable to be troubled with insects. Very vigorous. Pergola, arch, banks, etc. Prune 6, 7—.

ALEXANDER HILL GRAY. T. Flowers deep lemon-yellow, which intensifies as the blooms develop; large, of deep substance and perfect formation. Gold Medal, N. R. S. Garden, bedding, cut-flower. Prune 4.

ALISTER STELLA GRAY (Golden Rambler). N. Flowers rich apricot-yellow, changing to white with yellow center; delightfully fragrant and constant in bloom. Moderately vigorous. Pillar, arch, trellis. Needs winter-protection. Prune 5, 7+.

- AMERICAN BEAUTY.** H.P. Flowers deep pink to crimson; intensely fragrant. Cut-flowers. Prune 2 for Ex., 4 for Q.
- AMERICAN BEAUTY, CLIMBING.** H.W. Flowers deep pink to crimson; fragrant. Produces hundreds of perfect blooms at one time. Very vigorous. Pergola, arch, porch, etc. Prune 6, 7-.
- AMERICAN PILLAR.** Mult. Flowers chaste pink; single; large, 3 to 4 inches across; in large clusters. Leaves almost evergreen. Very vigorous. Has attractive, brilliant red hips in autumn. Pergolas, pillar, etc. Prune 6, 7. (See illustration in color, on title-page.)
- ANNA DE DIESBACH.** H.P. Flowers rose; fragrant; profuse. Garden. Prune 1 for Ex., 3 for Q. (See illustration, page 43.)
- ANTOINE RIVOIRE.** H.T. Creamy white to deeper yellow and peachy pink center. Vigorous. Garden and bedding. Prune 3.
- ARTHUR R. GOODWIN.** H.T. Buds and flowers rich coppery orange-red which shades to salmon-pink as the flower ages; very lasting; blooms large and double. Garden, bedding. Prune 3.
- AUNT HARRIET.** H.W. Flowers scarlet-crimson, very bright. Vigorous. Pergola, pillar. Prune 6, 7.
- AVIATEUR BLERIOT.** H.W. Flowers deep saffron-yellow and copper. Vigorous. Pergola, arch, pillar, etc. Prune 6, 7.
- BABY DOROTHY.** P. Flowers bright pink. Incessant bloomer. Dwarf, 20 in. Bedding, edging. Prune 3.
- BABY RAMBLER, RED** (Mme. Norbert Levavasseur). P. Flowers dark red. Blooms all the time. Dwarf. Bedding, edging. Prune 3. (See cut page 43.)
- BEAUTY OF ROSEMAWR.** Bou. Flowers rich carmine-rose, veined with creamy white. Very floriferous. Garden, bedding. Prune 4.
- BESS LOVETT.** H.W. Flowers scarlet-crimson. Very vigorous. Pergola, pillar, arch, etc. Prune 6, 7.
- BETTY.** H.T. Flowers coppery rose and golden yellow; very fragrant. A novelty. Garden, bedding. Prune 1 for Ex., 3 for Q.
- BIRDIE BLYE.** Mult. Flowers bright satiny rose. Continual bloomer. Grows 4 to 6 feet. Pillar, bush. Prune 5.
- BLANC DOUBLE DE COUBERT.** H.R. Flowers white, double, large and showy. Very hardy. Vigorous. Hedge, bush. Prune 5, 7-.
- BLANCHE MOREAU.** M. Flowers pure white; large and full. Bedding. Prune 3.
- BRIDESMAID.** T. Flowers rose-pink, crimson-shaded; full and fragrant. Bedding, cut-flower. Prune 2 for Ex., 4 for Q. (See illustration in color, page 103.)
- CARMINE PILLAR.** C.H.T. Flowers single, rich carmine-red; very fine; looks like a clematis. Vigorous. Trellis, pillar, arch. Prune 5.



With petals fashioned like sea-shells, tinted and toned in shades of rose and pink, superlatives fail in describing the satisfactory beauty of KILLARNEY, the renowned Hybrid Tea Rose.

Fortunate it is for Rose-lovers that Mother Nature has been so generous in giving us so many members in the Killarney family, all of them rare beauties, such as Killarney Brilliant, Killarney Queen, and White Killarney.

For open-ground planting under different conditions of climate, this Killarney Rose family may be depended upon to repay bountifully the attention and care which all Roses should receive.

CHAMPION OF THE WORLD (Mrs. De Graw). Bou. Flowers rich, rosy pink; large, full and deliciously sweet. Free bloomer. Garden bedding. Prune 5.

CHATEAU DE CLOS VOUGEOT. H.T. Flowers velvety maroon, shaded fiery red, very dark. Garden. Prune 2. (See illustration, page 47.)

CHRISTINE WRIGHT. H.W. Flowers clear wild-rose-pink; beautiful in bud. Foliage large, thick, leathery. Pillar, arch, arbor, trellis. Prune 6, 7.

CLIO. H.P. Flowers flesh-color, shaded pink; large; fine form. Vigorous. A very choice variety. Garden. Prune 1 for Ex., 3 for Q.

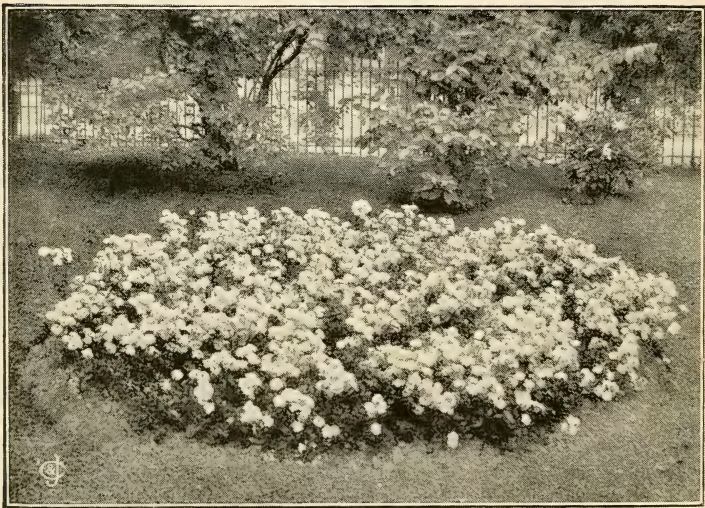
COLUMBIA. H.T. Flowers rose-pink, very large and double. Garden, bedding. Prune 1 for Ex., 3 for Q.

CONRAD F. MEYER. H.R. Flowers clear silvery rose; large, perfectly double, elegantly formed; very fragrant; flowers and buds of fine form. Very hardy. Garden, bush or hedge. Prune 6+.

CORONATION. H.W. Flowers crimson-scarlet. Very vigorous. New. Pergola, arch, porch, etc. Prune 6, 7-.

CRESTED MOSS. M. Flowers choice pink, and heavily mossed. A lovely old favorite. Bedding. Prune 3.

DEVONIENSIS. T. Flowers creamy white with rosy center. Very full. An old-time favorite. Garden, bedding. Prune 2.



An all-summer show of bloom. An example of what Baby Ramblers will do in a bed



Chateau de Clos Vougeot (see p. 46)



Sunburst (see page 61)

DR. W. VAN FLEET. H.W. Flowers rich flesh-color. Stems 18 inches long. **CHOICE.** Very vigorous. Pergola, arch, etc. Prune 6, 7-.

DOROTHY PERKINS. H.W. Flowers beautiful shell-pink; free-bloomer; large clusters. Most popular rose in its class and color, and blooms in time for use at June weddings. Very vigorous. Arches, porches, pergolas, etc. Prune 6, 7-. (See illustration in color, page 58.)

DOROTHY PERKINS, WHITE. H.W. Flowers snow-white; free-bloomer; large clusters. Very vigorous. Habit like Pink Dorothy Perkins. Arches, porches, pergolas, etc. Prune 6, 7-.

DUCHESSE DE BRABANT. T. Flowers deep rosy pink, edged with silver. Has been extensively planted about the White House, at Washington, D. C., a free bloomer. Bedding. Prune 4.

DUCHESS OF WELLINGTON. H.T. Flowers intense saffron-yellow. Garden, bedding, cut-flower. Prune 3. (See cut page 49.)

ELLEN POULSEN. T.P. Flowers brilliant pink; full; sweet-scented. Very floriferous. Garden, bedding, edging. Prune 3.

ERNA TESCHENDORFF. P. Flowers rich crimson, freely produced. An improved Red Baby Rambler. Bedding, edging. Prune 3.

ETOILE DE FRANCE. H.T. Flowers intense, brilliant crimson; extra-large, double; very free bloomer; fragrant; buds large, pointed. Vigorous. Bedding. A choice variety. Prune 2.

EXCELSA (Red Dorothy Perkins). H.W. Iridescent rosy crimson. Very vigorous. Late-flowering. Fine in every way. Arch, porch, trellis, etc. Prune 6, 7-.



Frau Karl Druschki

Gen. Jacqueminot

Gloire Lyonnaise
See page 49

FLORENCE PEMBERTON. H.T. Flowers creamy white, suffused pink; large, full, perfect form; high-pointed center. Bush, garden. Prune 2.

FRANCIS SCOTT KEY. H.T. Flowers crimson-red and very full. Garden, bedding. Prune 2.

FRAU KARL DRUSCHKI (White American Beauty). H.P. Flowers pure snow-white; immense ($\frac{4}{5}$ to 5 inches across), perfectly double. The finest pure white rose in this class; not fragrant. Vigorous. Bedding, bush, garden. Prune 1 for Ex., 3 for Q. (See illustration.)

GARDENIA. H.W. Flowers yellow, changing to creamy white; fragrant; free bloomer. Very vigorous; creeping. Prune 6, 7-. (See illustration in color, page 12.)

GENERAL JACQUEMINOT. H.P. Flowers brilliant crimson, velvety; fragrant. Vigorous. Bedding, garden, pot, and standard. Prune 2 for Ex., 3 for Q. (See illustration in color, page 70.)

GENERAL MACARTHUR. H.T. Flowers glowing crimson-scarlet; fragrant. Vigorous. Bedding, garden. Prune 2.

GENERAL-SUPERIOR ARNOLD JANSSEN. H.T. Flowers deep glowing carmine, large, and freely produced. Garden, bedding. Prune 2.

GEORGE ARENDS (Pink Frau Karl Druschki). H.P. Flowers tender, rose-pink. Garden, bedding. Prune 1 for Ex., 3 for Q.

GEORGE DICKSON. H.T. Flowers velvety dark crimson, back of petals heavily veined with deep, pure crimson-maroon. Garden, bedding. Prune 2.

GEORGE ELGER. P. Flowers rich chrome-yellow; small but produced continually. Garden, bedding. Prune 3.

GLOIRE DE CHEDANE GUINOISSEAU. H.P. Flowers bright vermilion-red. Bedding, garden. Prune 2 for Ex., 3 for Q.



Duchess of Wellington
See page 47



Los Angeles
See page 52



Ophelia
See page 59

GLOIRE LYONNAISE. H.P. Flowers pale lemon; large. Very vigorous. Garden, bedding. Prune 2 for Ex., 3 for Q. (See illustration, page 48.)

GRUSS AN AACHEN. T.P. Flowers flesh-pink and yellow; very double and free-flowering. Vigorous. Edging, bedding. Prune 4.

GRUSS AN TEPLITZ. H.T. Flowers bright crimson; free bloomer. Vigorous. Garden, bedding, bush, and standard. Prune 5.

GRUSS AN TEPLITZ, CLIMBING. C.H.T. Flowers crimson, passing to velvety, fiery red. Vigorous. Pillar, arch. Prune 7—.

HADLEY. H.T. Flowers deep velvety crimson that does not fade; perfectly formed. Garden, bedding. Prune 1 for Ex., 3 for Q.

HARISON'S YELLOW. A.B. Flowers clear golden yellow cover the bush; blooms early. Vigorous. Bush, hedge. Prune 5.

HARRY KIRK. T. Flowers deep sulphur-yellow with edge of petals lighter; intensely fragrant. Garden, bedding. Prune 2.

HENRI MARTIN. M. Flowers bright rosy red; fragrant; large. Free bloomer; vigorous. Fine in its class. Prune 3.

HERMOSA. C. Flowers pink, in clusters; fragrant. Free bloomer; vigorous. Garden, bedding, and standard. Prune 3.

HIAWATHA. H.W. Flowers brilliant scarlet; single; bright and effective. Vigorous. Arch, trellis, etc. Prune 6, 7—.

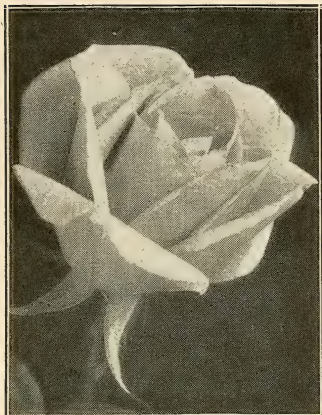
HOOSIER BEAUTY. H.T. Flowers glowing crimson; one of the richest-colored roses in cultivation; large, full, and deliciously sweet. Garden, bedding, cut-flower. Prune 3.

HUGH DICKSON. H.P. New. Flowers brilliant crimson, shaded scarlet; very large and full; fine form. Free-flowering and vigorous. Highly perfumed. Garden. Prune 1 for Ex., 3 for Q.

- HUGONIS.** Species. New. Flowers clear yellow, single, but produced in such profusion that they almost hide the foliage. Foliage is small and dainty, more like an acacia than a rose leaf. Hardy everywhere in the United States. Bush, hedge. Prune 5.
- HUGO ROLLER.** T. Flowers lemon-yellow and crimson. A tea-scented "pictorial" flower. Garden, bedding. Prune 2 for Ex., 4 for Q.
- IRISH FIREFLAME.** H.T. Flowers orange and crimson; large and single, borne in lovely sprays. Garden, bedding. Prune 3.
- J. B. CLARK.** H.P. Flowers intense, deep scarlet, shaded blackish crimson. Vigorous. Garden, bedding. Prune 2 for Ex., 3 for Q.
- JONKHEER J. L. MOCK.** H.T. Flowers carmine on the outside, lovely soft pink inside. Garden, bedding, cut-flower. Prune 2.
- JOSEPH HILL.** H.T. Flowers pure salmon and gold, outside of petals pinkish copper. Garden, bedding. Prune 2.
- JULIET.** Per. Flowers old-gold on the outside while the inside is rosy red, changing to deep rose as the flowers expand. Large, full, and delightfully fragrant. Garden, bedding. Prune 4.
- KAISERIN AUGUSTE VICTORIA.** H.T. Flowers white, shading to lemon; deep; full; fragrant. Free bloomer. Garden. Prune 3. (See page 60.)
- KATHARINA ZEIMET** (White Baby Rambler). P. Flowers pure white, blooms incessantly. Bedding, edging. Prune 3. (See illustration, page 46.)
- KILLARNEY.** H.T. Flowers brilliant pink; long, pointed buds. Free bloomer; moderately vigorous. A great favorite. Garden, bedding, cut-flower. Prune 3. (See illustration in color, page 45.)
- KILLARNEY BRILLIANT.** H.T. Flowers larger, more double, and a deeper pink than the parent Killarney; fragrant. A free bloomer. Garden, bedding, cut-flower. Prune 3.
- KILLARNEY, WHITE.** H.T. Flowers pure white, long-pointed buds. Vigorous. Garden, bedding, cut-flower. Prune 3. (See illustration, page 153.)
- LADY ALICE STANLEY.** H.T. Flowers deep coral-rose and pale flesh; large; exceptionally full; very lasting when cut. Garden, bedding, cut-flower. Prune 3.
- LADY ASHTOWN.** H.T. Flowers pale rose, shading to yellow at base of petals. Garden, bedding. Prune 1 for Ex., 3 for Q.
- LADY ASHTOWN, CLIMBING.** C.H.T. Flowers pale rose, shading to yellow at base of petals. Vigorous. Pillar, trellis, arch. Prune 6.
- LADY HILLINGDON.** T. Flowers deep apricot-yellow, shading to orange. Garden, bedding, cut-flower. Prune 2. (See cut, page 52.)
- LADY MARY WARD.** H.T. Flowers rich orange, shaded deeper orange with metallic veneering. Garden, bedding. Prune 2.
- LADY PIRRIE.** H.T. Flowers coppery red, changing to salmon and ivory-white. Garden, bedding. Prune 2.



Among the pink Hybrid Perpetual Roses, MRS. JOHN LAING stands well in the lead,—not so large as Paul Neyron, but more free in bloom, with excellent form, clear color and rich fragrance. GEORGE ARENDS also is worth noting as in the same class with the above and with even finer form.



Lady Hillingdon (see page 50)



Wm. R. Smith (see page 62)

LA FRANCE. H.T. Flowers silvery rose, changing to pink; fine form; sweet; large; lovely buds. Moderately vigorous. Garden, bush, standard, and cut-flower. Prune 2. (See illustration, page 53.)

LA TOSCA. H.T. Flowers rose. Free bloomer; good; vigorous. Garden, bush, bedding. Prune 2 for Ex., 4 for Q.

LAURENT CARLE. H.T. Flowers brilliant, velvety carmine; large and perfect; intensely fragrant. Garden, bedding. Prune 2. (See p. 57.)

LE POILU. H.W. Flowers satiny rose, passing to pinkish lavender. Vigorous. Pergola, arch, porch, etc. Prune 6.

LOS ANGELES. H.T. Flowers luminous pale pink and coral shaded with gold; large and very fragrant. Vigorous. Garden bedding. Prune 1 for Ex., 3 for Q. (See illustration, page 49.)

LOUISE CATHERINE BRESLAU. Per. Flowers shrimp-pink, shaded with reddish coppery orange and chrome-yellow on the reverse of petals. Garden, bedding. Prune 5.

LOUISE WELTER (Baby Tausendschön). P. Flowers deep pink to white, identical in color with the popular climbing Tausendschön, or Thousand Beauties. Bedding, edging. Prune 5.

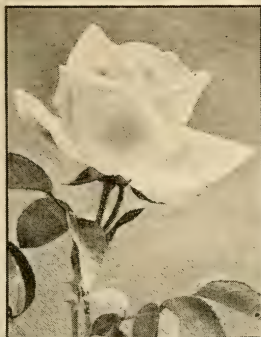
MME. ALFRED CARRIERE. N. Flowers cream-white, tinged pale yellow; large, full, double, and sweet. Vigorous grower. Porch, arch, trellis. Prune 7.

MME. CAMILLE. T. Flowers flesh, changing to salmon; large, full and sweet. Constant bloomer; vigorous. Bedding. Prune 2.

MME. CAROLINE TESTOUT. H.T. Flowers clear pink, edged silvery rose. Magnificent variety. Garden, bedding. Prune 2. (See illustration in color, page 12.)



Magna Charta
See page 56



White Killarney
See page 50



La France
See page 52

MME. CAROLINE TESTOUT, CLIMBING. C.H.T. Flowers clear, rich pink; large and full. Vigorous. Pillar, arch, trellis. Prune 7.

MME. CHARLES LUTAUD. H.T. Flowers deep chrome-yellow, sometimes tinged rosy scarlet. Garden, bedding. Prune 2.

MME. EDMOND ROSTAND. H.T. Flowers pale flesh, shaded with salmon, center reddish orange—distinct and charming. Garden, bedding. Prune 5.

MME. EDOUARD HERRIOT (The Daily Mail Rose). Per. The most unique variety, recently introduced. Flowers medium size, semi-double, superbly colored, coral-red shaded with yellow and bright rosy scarlet, passing to prawn-red. Garden, bedding. Prune 5.

MME. EUGENE MARLITT. Bou. Flowers carmine-red; fragrant. Free bloomer. Vigorous. Bedding. Prune 4, tip severely.

MME. JULES GROLEZ. H.T. Flowers china-rose, passing to clear, rich satiny pink. Garden, bedding. Prune 2.

MME. LEON PAIN. H.T. Flowers silvery salmon, center orange-yellow. Garden, bedding. Prune 2.

MME. MELANIE SOUPERT. H.T. Flowers salmon-yellow, suffused carmine; fragrant. Free bloomer. Garden, bedding. Prune 2. (See p. 61.)

MME. PLANTIER. Alba. Flowers pure white. Vigorous; very free bloomer. Bush, hedge. Prune 6.

MME. RAVARY. H.T. Flowers rich orange-yellow. Free-blooming and deliciously fragrant. Garden, bedding. Prune 2.

MME. SECOND WEBER. H.T. Flowers salmon-flesh color, deep pink when opening. Garden, bedding. Prune 2.

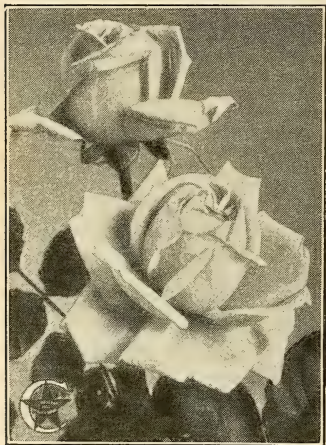
MLLE. CECILE BRUNNER. P. Flowers seashell-pink, borne in sprays continually. Garden, bedding, bouquets. Prune 5.



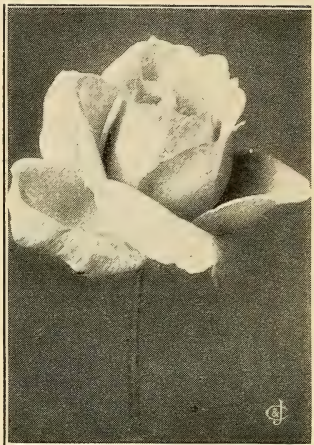
ROSE-ARCH AND



-GARDEN IN HARRISBURG



Miss Alice de Rothschild
See page 57



Mrs. Wakefield Christie-Miller
See page 57

MAGNA CHARTA. H.P. Flowers pink, suffused with carmine. Vigorous. Bedding. Prune 2 for Ex., 3 for Q. (See illustration, page 53.)

MAMAN COCHET. T. Flowers deep coral-pink; large, very double, full; fragrant. Vigorous. Garden, bush. Prune 2.

MAMAN COCHET, PINK, CLIMBING. C.T. Flowers coral-pink, shaded rosy crimson. Porch, pergola, arch, etc. Prune 4.

MAMAN COCHET, WHITE. T. Flowers pure white; large, full and fragrant; buds long, pointed. Garden, bush. Prune 2.

MARECHAL NIEL. N. Flowers deep yellow; large, globular, full and sweet. Vigorous. A most beautiful climber. Hardy only in the South. Porch, pillar, pot, standard, etc. Prune 5.

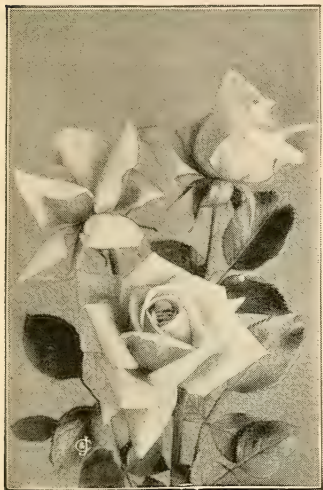
MARIE PAVIE. T.P. Flowers white with delicate rose center. Unsurpassed as a bush cemetery rose. Blooms unceasingly and is quite hardy. Garden, bedding. Prune 3.

MARIE VAN HOUTTE. T. Flowers pale yellow, edged rose; large, full, and fragrant. Constant bloomer; vigorous. Bedding. Prune 2.

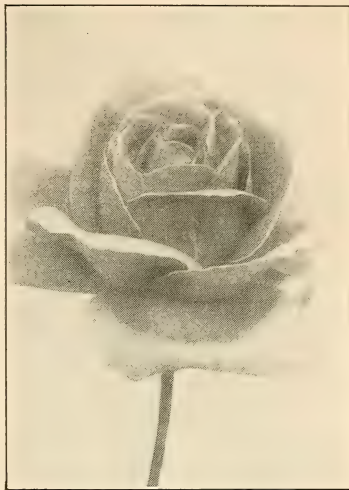
MARQUISE DE SINETY. H.T. Buds rich yellow-ocher, suffused with carmine; the expanded flower is yellow, shaded rosy red. Garden, bedding. Prune 2.

MARY, COUNTESS OF ILCHESTER. H.T. Flowers beautiful crimson-carmine; very large and double. Garden, bedding. Prune 2.

MARY LOVETT. W. Flowers pure pearly white; same type as the beautiful Dr. W. Van Fleet. Pergola, arch, etc. Prune 6, 7—.



Mrs. Aaron Ward



Laurent Carle (see page 52)

MAY QUEEN. W. Flowers clear bright pink and deliciously sweet. A great bloomer. Pergola, arch, pillar, bush, hedge. Prune 6.

MISS ALICE DE ROTHSCHILD. T. Flowers rich yellow. We call it *bush Marechal Niel*, although it is hardier. Garden, bedding. Prune 2. (See illustration, page 57.)

MRS. AARON WARD. H.T. Flowers Indian yellow, sometimes tinged salmon-rose. Garden, bedding; boutonniere. Prune 2. (See up.)

MRS. A. R. WADDELL. H.T. Flowers coppery red, suffused with salmon. Incessant bloomer. Garden, bedding. Prune 2. (See p. 61.)

MRS. B. R. CANT. T. Flowers rose-red; large, full, perfectly double; fragrant. Constant bloomer; vigorous. Garden, bedding. Prune 3.

MRS. EMILY GRAY. H.W. Flowers yellow; does not fade. Very vigorous. Porch, arch, pergola, wall, etc. Prune 7.

MRS. JOHN LAING. H.P. Flowers soft pink; large, full, and fragrant. Free bloomer; vigorous. Garden, bedding. Prune 1 for Ex., 3 for Q. (See illustration in color, page 51.)

MRS. ROBERT PEARY. C.H.T. Flowers lemon-white, perfectly formed. Moderately vigorous. Pillar, trellis. Prune 5.

MRS. WAKEFIELD CHRISTIE-MILLER. H.T. Flowers soft pearly blush. Garden, bedding. Prune 2. (See illustration, page 56.)

MY MARYLAND. H.T. Flowers lovely salmon-pink, very freely produced on long stems. Garden, bedding, cutting. Prune 2.



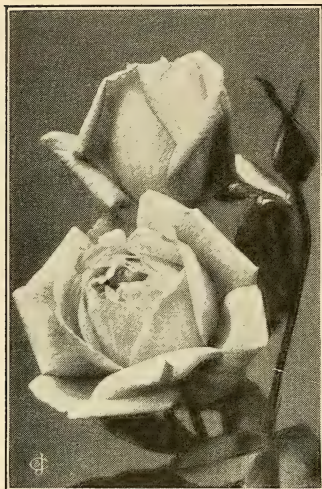
The list of Hardy Climbing Roses has been wonderfully enriched during the last fifteen years by the addition of such varieties as DOROTHY PERKINS (as pictured above); also White Dorothy and Excelsa, or Red Dorothy.

Their long, willowy branches, easily trained over almost any object, will, with reasonable care and nourishment, often attain a length of 20 feet in one season.

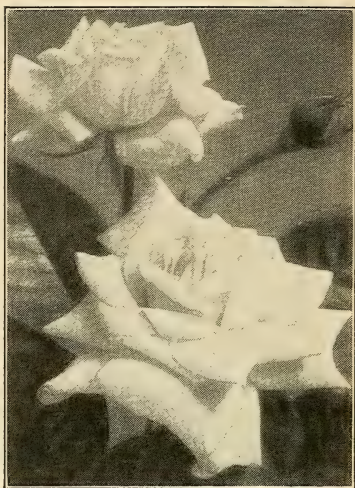
- NEW CENTURY. H.R. Flowers clear flesh-pink with light red center; deliciously sweet fragrance, like the wild rose. Extremely hardy. Hedge, bush, or garden. Prune 6.
- OPHELIA. H.T. Flowers salmon-flesh color, shaded with rose. Garden, bedding, cut-flower. Prune 2. (See illustration, page 49.)
- ORLEANS. P. Flowers vivid rosy crimson. Garden, bedding, edging. Prune 3.
- PAUL NEYRON. H.P. Flowers deep rose; fragrant; opens flat. Vigorous. Bedding, garden. Prune 1 for Ex., 3 for Q.
- PAUL'S SCARLET CLIMBER. H.W. Flowers vivid scarlet. Vigorous; very fine. Porch, arch, pergola, wall, etc. Prune 7.
- PERLE DES JARDINS. T. Flowers deep yellow; very large, full, and fragrant. Garden, bedding. Prune 2. (See illustration in color, page 32.)
- PERSIAN YELLOW. A.B. Flowers deep, rich, golden yellow. Garden, bush, hedge. Prune 6. (See illustration in color, page 63.)
- PHARISÄER. H.T. Flowers rosy white, shaded with salmon. Vigorous. Garden, bedding, cut-flower. Prune 2.
- PHILADELPHIA RAMBLER. Mult. Flowers intense crimson; double; in large clusters. Very vigorous. Arch, porch, etc. Hardy. Prune 6-, 7+.
- PRINCE CAMILLE DE ROHAN. H.P. Flowers velvety crimson; large. Vigorous. Bedding. Prune 2 for Ex., 3 for Q.
- QUEENS SCARLET. C. Flowers rich velvety scarlet; size medium. Constant in bloom. Garden, bedding. Prune 3.



Mrs. John Laing (see page 57)



Rayon d'Or

Kaiserin Auguste Victoria
See page 50

RADIANCE. H.T. Flowers rosy carmine and pink. Fine for mass planting. Garden, bedding. Prune 2.

RAYON D'OR. Per. Flowers rich yellow, turning to sunflower-yellow. Foliage very fine. Vigorous. Garden. Prune 3. (See cut.)

RED RADIANCE. H.T. Flowers clear cerise-red. Vigorous. Garden, bedding. Prune 1 for Ex., 3 for Q.

ROGER LAMBELIN. H.P. Flowers glowing crimson with pure white around the edge of each petal. Unique. Garden, bedding. Prune 1 for Ex., 3 for Q.

RUBY QUEEN. H.W. Flowers ruby, with white center; large; double; in clusters. Vigorous. Pergola, pillar, etc. Prune 6, 7+.

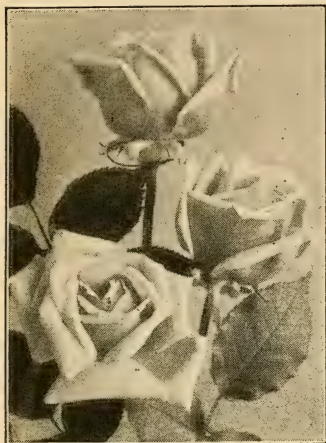
RUGOSA ALBA. R. Flowers snow-white; large; single. Free bloomer. Very vigorous. Bush, hedge. Prune 6.

RUGOSA RUBRA. R. Flowers rosy crimson; large; single. Free bloomer. Very vigorous. Bush, hedge. Prune 6.

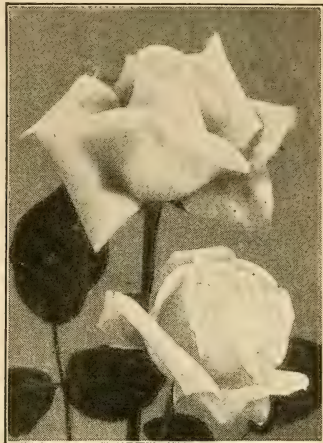
SAFRANO. T. Flowers apricot-yellow; fragrant; semi-double. Constant bloomer. Vigorous. Bedding, garden. Prune 3.

SHOWER OF GOLD. H.W. Flowers deep golden yellow, borne in fine trusses. Beautiful, vivid, glossy green foliage. Very vigorous. Arch, pergola, porch, etc. Prune 6, 7-.

SILVER MOON. H.W. Flowers snow-white; very large; single. Very vigorous. Arch, pergola, porch, etc. Prune 7.



Mme. Melanie Soupert
See page 53



Mrs. A. R. Waddell
See page 57

SIR THOMAS LIPTON. H.R. Flowers pure white; fragrant. Constant bloomer. Leaves beautiful. Very hardy. Vigorous. Hedge, bush. Prune 5, 7+.

SOLEIL D'OR (Sun of Gold). Per. Flowers reddish gold, orange-yellow, nasturtium-red, and rosy pink; spicy orange fragrance. Garden, bedding. Prune 4.

SOUV. DE GUSTAVE PRAT. H.T. Flowers clear light sulphur-yellow. Garden, bedding. Prune 2.

SOUV. DE LA MALMAISON. Bou. Flowers lovely creamy flesh with rose center, elegantly shaded. Garden, bedding. Prune 3.

SOUV. DE PIERRE NOTTING. T. Flowers apricot-yellow, shaded orange. Garden, bedding. Prune 2.

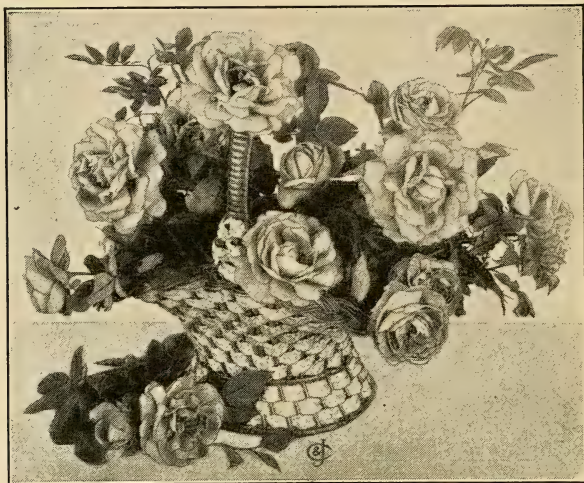
SOUV. DU PRESIDENT CARNOT. H.T. Flowers shell-pink, tinted with fawn; large and full. Garden, bedding, cut-flower. Prune 2.

SUNBURST. H.T. Flowers intense orange-copper and golden yellow. Extra fine. Garden, bedding. Prune 2.

SWEETBRIAR (*R. rubiginosa*). S.B. Flowers pink; single. Foliage delightfully fragrant. Vigorous. Hedge, bush. Prune 6, 7+.

TAUSENDSCHÖN. Mult. Flowers white to deep pink. Very vigorous. Has few thorns. Fine. Porch, arch, etc. Prune 6, 7- . (See illustration in color, page 78.)

TIP-TOP (Baby Doll). P. Flowers pink, yellow gold, and lavender combined. Dwarf grower. Bedding, edging. Prune 5.



A tasteful arrangement of Ulrich Brunner roses

ULRICH BRUNNER. H.P. Flowers rich red; fragrant; petals broad, round, thick. A standard variety. Vigorous. Garden, bedding, and standard. Prune 1 for Ex., 3 for Q. (See illustration in color, page 94.)

VIRIDIFLORA. C. Flowers with curious green petals, like a bunch of calyxes. Fine for St. Patrick's Day. Blooms freely. Garden. Prune 2.

WICHURAIANA. W. Flowers pure white; single. Leaves glossy, free from insects. Will grow anywhere. Splendid for holding banks from washing. Vigorous. Creeping. Prune 6, 7+.

WILLIAM ALLEN RICHARDSON. N. Flowers coppery yellow, tinged with carmine; deliciously fragrant. Not hardy. Splendid for the South. Vigorous. Porch, pillar. Prune 5.

WM. R. SMITH. T. Blush-pink; large; full. Vigorous grower. Garden, bedding. Prune 1 for Ex., 3 for Q. (See illustration, page 52.)

WILLIAM SHEAN. H.T. Flowers pure pink with delicate ochery venation; very large. Vigorous. Bedding, garden. Prune 3.

WILLOWMERE. H.T. Flowers rich shrimp-pink, shaded yellow in the center. Garden, bedding. Prune 4.

YORK AND LANCASTER. Damask. Flowers striped red and white. Very hardy. A very old and rather rare rose. Associated with the "Wars of the Roses." Garden. Prune 4. (See illustration, page 7.)



The beautiful **PERSIAN YELLOW** Rose is commended highly, especially to those living in the colder sections of our country.

Its rich coloring and hardiness, combined with its early season of bloom and fragrant young foliage, give it a value among Roses comparable to the value of gold among metals.

A cousin to this Rose is **HARISON'S YELLOW**; like it in color but less double in bloom and more able to care for itself wherever planted. Both bloom earlier than even the Rugosas though not so early as **HUGONIS**.



La France. Beautiful on the lawn; just as fine in vases

Roses for Various Purposes and Uses

Twelve Star Varieties

In selecting the best roses, there are so many qualities to be considered that it requires a large collection and unusual opportunities to watch and study them under every possible condition they are likely to encounter. We have been fortunate in having unusual facilities for this experimental work. Furthermore, our observation extends over a long period of years, during which, each season, we have obtained and tried out all new sorts of promise, and thus aim to have the best obtainable constantly on trial. We also travel extensively and visit rose-gardens in many states of the Union. Due regard has been given to the published experiences of other dependable rose-lovers, in reaching our own conclusions.

To pass our severe test, a rose must prove itself a vigorous grower and an abundant bloomer, and must also excel its rivals either in size, color, form, fragrance, or habit.

So many friends ask us to select their roses that we believe they must have read Pemberton's advice. (See page 38.)

These pages answer your questions before you ask them; they save you the expense of experiments; and, if you do your part, you can count on a reward of good bloom.

Columbia (H.T.). Pink.
 Duchess of Wellington (H.T.).
 Yellow.
 Frau Karl Druschki (H.P.). White.
 General MacArthur (H.T.). Red.
 Gruss an Teplitz (H.T.). Red.
 Kaiserin Auguste Victoria (H.T.).
 White.

Los Angeles (H.T.). Pink.
 Prince Camille de Rohan (H.P.).
 Red.
 Radiance (H.T.). Pink.
 Red Radiance (H.T.). Red.
 Sunburst (H.T.). Yellow.
 White Maman Cochet (T.). White.

Twelve Cold-Country Roses

Here are roses selected from among those that live outdoors over winter and thrive in localities north of the latitude of New York and Chicago. These laugh at zero weather.

Conrad F. Meyer (H.R.). Pink.
 Frau Karl Druschki (H.P.). White.
 George Arends (H.P.). Pink.
 Gloire de Chedane Guinoisseau
 (H.P.). Red.
 Gloire Lyonnaise (H.P.). Cream.
 Hugh Dickson (H.P.). Red.

May Queen (H.W.). Pink.
 Mrs. John Laing (H.P.). Pink.
 Paul Neyron (H.P.). Pink.
 Sir Thomas Lipton (H.R.). White.
 Souv. de P. Leperdrieux (H.R.).
 Red.
 Ulrich Brunner (H.P.). Red.



Hybrid Rugosas.

Invaluable for cold-country planting. Note the beautiful foliage



Nearly every home may have a dozen bushes like these

Twelve Sunny South Roses

If you live on the sunny side of the frost-line and wish a set of superior sorts for a warm country, here are twelve that we know you will find supremely satisfying.

These are our favorite twelve in a climate where there is little danger from frost. They will winter well as far north as Washington, D. C.

Countess of Gosford (H.T.). Salmon.

Duchess of Wellington (H.T.). Yellow.

Hadley (H.T.). Red.

Hoosier Beauty (H.T.). Red.

Maman Cochet (T.). Pink.

Marie Van Houtte (T.). Tinted.

Mme. Melanie Soupert (H.T.). Yellow.

Mrs. B. R. Cant (T.). Red.

Radiance (H.T.). Pink.

Safrano (T.). Yellow.

Sunburst (H.T.). Yellow.

White Killarney (H.T.). White.

Climbing Roses That Will Cover Quickly, Trellises, Porches, Buildings, Etc.

Every home has room for a few climbers, because vines around a house decorate it as nothing else does, and to have vines that will hand you forth roses—imagine the pleasure of that!

Where you live makes a difference; roses that will grow to cover your house with bloom in northern New England are not the kinds to do the same in the sunny South. So, think of these things when you order, or, better still, leave it all to your grower, who will select to suit your home and climate. For example, here are three sets, each one good for the section indicated. Order accordingly, and you will get pleasing results.

(See list of climbing roses recommended for this purpose on page 68.)



Dorothy Perkins roses in cold New England, growing over a cottage of Thos. W. Lawson, Dreamwold, Massachusetts.

We recommend the following roses for the uses described on the preceding page:

<i>For a Warm Climate—Everblooming Climbers—</i>		Page
Climbing Gruss an Teplitz. Red		49
Mrs. Robert Peary. White		57
Marechal Niel. Yellow		56
Climbing Pink Maman Cochet. Pink		56
<i>For a Temperate Climate (latitude of Philadelphia and New York)—</i>		
Dorothy Perkins. Pink		47
Excelsa (Red Dorothy). Red		47
White Dorothy Perkins. White		47
Mrs. Emily Gray. Yellow		57
<i>For a Cold Climate (where winters are long and severe)—</i>		
Dr. W. Van Fleet. Pink		47
Mary Lovett. White		56
Ruby Queen. Red		60
Tausendschön. Pink and white		61

Archways, Arbors, Summer-Houses, Pergolas, and for Beautifying Boundaries, Fences, Etc.

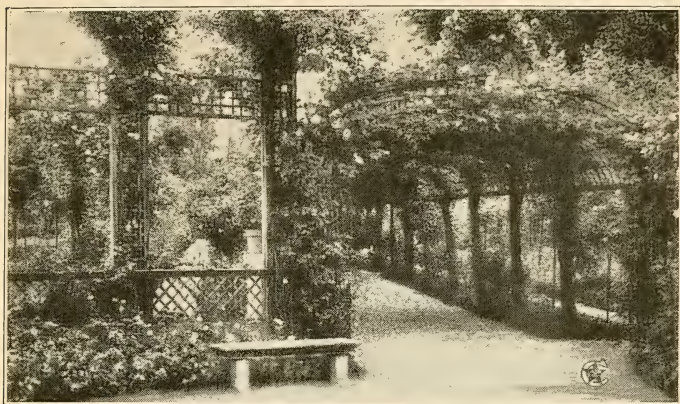


Effective uses of Hybrid Wichuraianas

Certain roses lend themselves admirably to being trained over objects on which they can have support. The best kinds for such a purpose, we think, are:

Dorothy Perkins.	
Pink	47
Ruby Queen. Red	60
American Pillar,	
Single. Pink . .	44
Excelsa (Red	
Dorothy Perkins).	47
Tausendschön.	
Blush	61
Aviateur Bleriot.	
Yellow	44

Quite as pretty an effect may be had with certain other kinds by



A lovely spot in the famous Graveraux Rose-garden near Paris

allowing them to grow over a fence, as shown on page 71. Their willowy vine-like branches are very graceful, the foliage is shiny and almost evergreen, giving these the advantage over the Ramblers of being attractive even when not in bloom and almost the entire year.

	Page		Page
Alberic Barbier	43	Gardenia	48
Coronation	46	Le Poilu	52
Dorothy Perkins. Pink	47	Silver Moon	60
Dorothy Perkins. White	47	Universal Favorite. Pink	115
Excelsa	47	Wichuraiana, Single. White	62

The above-mentioned roses flower during one period of the year only, but are hardier for cold climates than the following, which, if well cared for and properly nourished, will continue to produce some bloom during summer and autumn.

	Page
Climbing Gruss an Teplitz. Red	49
Climbing Killarney. Pink	115
Climbing Lady Ashtown. Pink	50
Climbing Mme. Caroline Testout	115
Climbing Pink Maman Cochet	56
Climbing White Killarney	115
Reine Marie Henriette	115
Shower of Gold. Yellow; shiny foliage	60



THE STANDARD HYBRID PERPETUAL, GEN. JACQUEMINOT

Do you know the quaint custom that still holds in one of the country towns of Pennsylvania, whereby, in accordance with the will of Baron Stiegel, there is paid for the church property, with an appropriate anniversary celebration, an annual rental of one red Rose?

No other Rose can be counted upon for this service so surely as the dear old favorite "Jack."

For Covering a Bank, Stumps, or Like Objects

The Wichuraiana is an ideal cover rose. It is remarkably free from both insects and disease and looks clean and fresh the entire year.

It bears bright berries, which the birds like. Enterprising railroad companies use Wichuraianas to hold embankments in place; they also add to the roadside beauty.

Gardenia (Hardy Marechal Niel). Yellow. (See page 48.)

Coronation. (New.) Pink. (See page 46.)

Universal Favorite (Double Pink Memorial). (See page 115.)

Wichuraiana (Single). White. For growing on banks. One plant of Wichuraiana will easily cover 6 square feet of ground. (See page 62.)

Most of the Hybrid Wichuraianas are also well suited for covering purposes.



Here is a beautiful hint, easily and cheaply adopted by anyone whose fences are bare. See varieties mentioned above

For Screen Planting and Borders, or Beautifying the Unightly

Almost every lawn might be improved, if some uncomely object or portion in the rear were screened from view. The right kind of roses will do it, and give you something beautiful instead. There are two ways to do it: (1) put up a trellis and train over it the roses named on page 71; or (2) if it be a low screen, you need only to plant the tall, erect-growing Rugosa roses. And if you want a luxuriant growth, dig the ground deeply and give these roses plenty of rich nourishment.

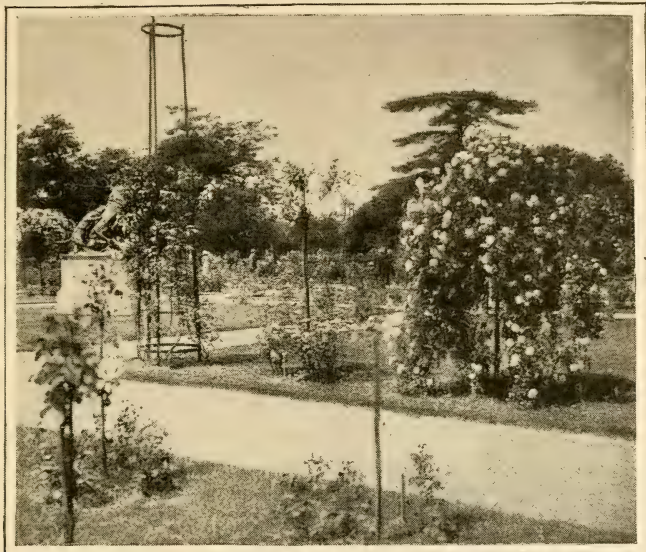
	Page		Page
Birdie Blye. Pink	44	Hugonis. Yellow	50
Conrad F. Meyer. Silvery pink	46	May Queen. Pink	57
Christine Wright. Pink	46	Ruby Queen. Ruby-red . . .	60
Harison's Yellow	49	Sir Thomas Lipton. White . .	61

These eight varieties, if set in one group, should be placed at least 2 to 3 feet apart.

Wonderfully pleasing effects may be obtained for screening out undesirable objects or views by the erection of trellis formations. These may be made of various designs and materials. Over these train the roses recommended on pages 68 and 69.



A fence made beautiful with Wichuraiana roses



The tree Roses in the Bagatelle Gardens in Paris are much larger than are customarily seen in American gardens. Some of these are 12 feet high, having been budded with Wichuraianas that weep to the ground.

Standard or Tree Roses

Tree roses add a distinct touch of elegance to any rose-garden. They occupy but little space and are quite imposing. Along the sides of walks they produce an avenue effect. They look well in the center of a small bed or even appropriately placed in the perennial border.

Tree roses are produced by budding such climbing and bush roses as Dorothy Perkins or Gruss an Teplitz on the tops of heavy, erect, cane-like stocks. The bush roses may be kept shapely. The climbers will weep to the ground.

Tree roses in the past have been less used in this country than in Europe because they are harder to grow in our climate, where summers are sometimes hot and dry. To overcome this handicap you can wrap the tall, slender stalks with moss and keep that moist. Such care, with special winter protection, is likely to be well repaid. They are quite scarce.

Rose Hedges

These boundary markers are certainly coming to be more and more popular as people learn about the splendid qualities of the *Rugosa* roses, Sweetbriars, or *Altaica* for this purpose. They are not neat, compact, and uniform in growth as is a hedge of California Privet, but the thick, bushy mass of glossy, crinkled foliage, especially of the *Rugosa*, gives a particularly fine appearance. They are perfectly hardy in the coldest winters and are more valuable because the foliage is not troubled with either insects or disease.

In warmer countries, or even in our own latitude, a single row of a free-flowering, erect, bushy rose is sure to be pretty and very satisfactory where one wishes simply to mark a boundary, as, for example, between the vegetable- and flower-garden. For this purpose, *Gruss an Aachen*, (see page 49) is excellent. The small-flowered *Polyanthas* are also popular, especially *Baby Rambler*, *Marie Pavie*, and *Baby Dorothy*. The list could readily be extended, and each one would be well worth planting. (See list of *Polyanthas*, page 113.)



Hybrid *Wichuraianas*, if given some support, make an excellent hedge

Roses for the Cemetery

For some cemeteries we recommend roses that almost care for themselves—the Wichuraiana type. They creep like ivy and make a mat of shiny foliage which is green for eleven months.

Next to these, we like the dwarf, compact-growing, free-flowering Polyanthas, especially the White Baby Rambler, Gruss an Aachen, Marie Pavie, and Echo. If you can care for bush roses, select from the “Best Yet” sets, according to locality. If you want some of the sturdiest growers obtainable, choose from this list:

	Page
Conrad F. Meyer (H.R.). Pink	46
Sir Thomas Lipton (H.R.). White	61
Frau Karl Druschki (H.P.). White	48
Mme. Plantier (Alba). White	53

Single Roses

These are an interesting group in themselves and represented in various classes. The single Irish roses are best among the Hybrid Teas.

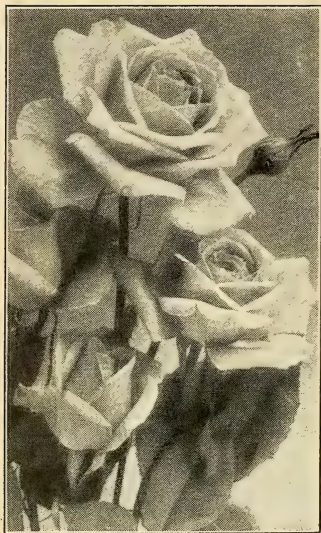
Irish Elegance (see cut)
Irish Brightness
Irish Fireflame

The species are most interesting specimens, among which are Xanthina, Moyesii, and Hugonis. One of the largest flowered of the subspecies is Altaica (page 109)

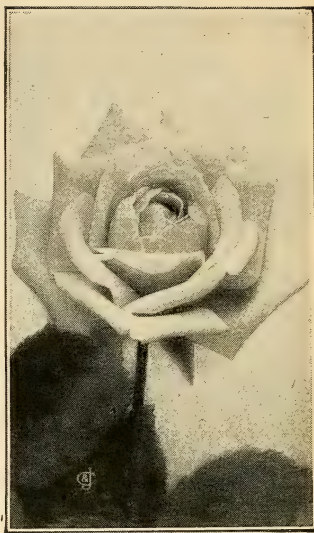
For Edging Beds

See Polyanthas, p. 113.





Columbia (see page 46)



Radiance (see page 60)

For "Forcing" under Glass or for Indoor Winter Bloom

These varieties are grown by professional florists in glass-houses where they can with nicety regulate the supply of heat and moisture, to produce the long-stemmed "beauties" seen in florists' windows. While a greenhouse or conservatory is a wonderful help, indeed essential for best results, some people have wonderful success even in their homes by growing roses where there is plenty of light and air. Both coal-gas and too dry air are injurious to plant-life and are to be carefully guarded against.

The list of cut-flower roses most popular in the general use is not a long one but is liable to change by reason of the great demand among patrons for something new. At present the best are: Columbia, Premier, Red Columbia, Ophelia, Pilgrim, Double White Killarney, Mrs. Aaron Ward, Killarney Brilliant, Sunburst, Mrs. Charles Russell, Mlle. Cecile Brunner, Radiance, American Beauty, and Kaiserin Auguste Victoria.

Selections for Special Sections of the United States of America

Those of our readers who live in the more thickly settled sections of our country will recognize, in the following, our dependence upon the modern scientific method of learning the "best roses" for certain localities, i.e., the method of actually testing them. We have had the good fortune to visit personally and to know the rose experts in many sections, and they severally have been so kind as to give us the benefit of their valuable experience, each in the form of a list of roses they have found to thrive. We stand back of these recommendations. (See, also, pages 64 to 76, inclusive.)

For the Pacific Northwest

Portland, Ore., is without question the rose-growing center of the Pacific Northwest. Nearly everybody there grows roses, and the city itself gives promise of having soon the finest municipal rose-garden in America. Among Portland's rose-growers we know of none more enthusiastic and better versed than Mr. J. A. Currey, Chairman of the American Rose Society's National Rose Test-Garden, to whom we are indebted for the following recommendations:

Twelve best roses for general cultivation

Columbia	Mme. Caroline Testout
Frau Karl Druschki	Mme. Melanie Soupert
General MacArthur	Maman Cochet
Grange Colombe	Ophelia
Gruss an Teplitz	Richmond
Hugh Dickson	Ulrich Brunner

Six best climbing or rambling roses

American Pillar	Mme. Alfred Carriere
Dorothy Perkins	Mme. Caroline Testout, Climbing
Gloire de Dijon	Wm. Allen Richardson

Six best red roses for general cultivation

Avoca	J. B. Clark
General MacArthur	Richmond
Hugh Dickson	Ulrich Brunner



TAUSENDSCHON, or Thousand Beauties, is the appropriate name of this lovely, vigorous and desirable Hardy Climbing Rose; almost thornless.

Roses for the Pacific Northwest, continued

Six best white roses for general cultivation

British Queen
 Florence Pemberton
 Frau Karl Druschki

Grange Colombe
 Mme. Jules Bouché
 Mrs. Foley-Hobbs

Six best pink roses for general cultivation

Columbia
 Lady Ashtown
 Mme. Caroline Testout

Maman Cochet
 Miss Kate Moulton
 Ophelia

Six best yellow roses for general cultivation

Joseph Hill
 Lady Hillingdon
 Mme. Melanie Soupert

Mme. Ravary
 Mrs. Aaron Ward
 Sunburst

For Minneapolis and Vicinity

Minneapolis has the largest public rose-garden in the Northwest, and Mr. Theodore Wirth, Superintendent of Parks, of Minneapolis, Minn., recommends for his section of the country the following list of roses:

Hybrid Perpetuals

Anna de Diesbach
 Baroness Rothschild
 Captain Hayward
 Clio
 Frau Karl Druschki
 General Jacqueminot
 Heinrich Schultheis

Hugh Dickson
 J. B. Clark
 Jules Margottin
 Louis Van Houtte
 Marie Finger
 Marshall P. Wilder

Mme. Gabriel Luizet
 Mrs. John Laing
 Paul Neyron
 Prince Camille de Rohan
 Tom Wood
 Ulrich Brunner

Hybrid Teas

Aaron Ward
 Alfred Colomb
 General MacArthur
 George Dickson
 Gruss an Teplitz
 Jonkheer J. L. Mock
 Kaiserin Auguste Victoria
 Killarney, Pink and White

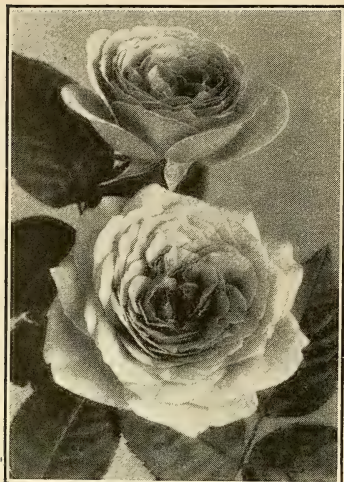
Lady Ashtown
 Lady Ursula
 La France
 Laurent Carle
 Mary, Countess of Ilchester
 Maman Cochet, White and Pink
 Miss Cynthia Forde

Mme. Caroline Testout
 Mme. Jules Grolez
 Radiance
 Red Radiance
 Souv. du President Carnot
 Totote Gelos
 Willowmere

Climber Ramblers

Crimson Rambler

Tausendschön. (See opposite page.)



Lady Alice Stanley

Roses for Minneapolis and Vicinity, continued

Polyanthas

Abundance
 Clotilde Soupert
 Gloire des Polyanthas
 Jessie
 Marie Pavie
 Mlle. Cecile Brunner
 Mme. Norbert Levavasseur
 Mme. Zelia Bourgeois
 Mrs. W. H. Cutbush
 Orleans
 Primula
 Triomphe Orleanais
 White Clotilde Soupert

Climbing Wichuraianas

Dorothy Perkins Minnehaha
 Hiawatha Paradise
 La Fiamma The Farquhar Rose

For Central New York State

Rev. E. M. Mills, D.D., is president of the Syracuse (New York) Rose Society, and perhaps America's nearest prototype of Dean Hole, England's great rosarian of beloved memory. He recommends the following as the best collection of twenty-five Hybrid Teas and Teas for Syracuse and vicinity, considering hardiness, variety of color, vigor of growth, and freedom of bloom.

Hybrid Teas

Antoine Rivoire
 Chateau de Clos Vougeot
 Columbia
 Duchess of Wellington
 Florence Pemberton
 General MacArthur
 Gruss an Teplitz
 Killarney, Pink
 Königin Carola
 Lady Alice Stanley

Lady Ashtown
 Laurent Carle
 Mme. Jules Bouché
 Mme. Melanie Soupert
 Mme. Segond Weber
 Miss Cynthia Forde
 Mrs. Aaron Ward
 Ophelia
 Radiance
 Sunburst

Teas

Harry Kirk
 Lady Hillington

Marie Van-Houtte
 White Maman Cochet

Wm. R. Smith

For Roslyn and Northwest Long Island

Admiral Aaron Ward*, in 1916, recommended the selection given below. It was based upon the following requirements: autumn blooms indispensable; weak growers barred; also plants of huge growth, like La Tosca or Gruss an Teplitz, except for use in mass effects; flowers to be full, no thinner than Pharisäer; climbers not included.

Pernetianas

Constance
Lyon Rose

Mme. Edouard Herriot
Willowmere

Teas

Mme. Antoine Mari
Mme. Jean Dupuy
Marie Van Houtte

Paula
Wm. R. Smith

Hybrid Perpetual

Frau Karl Druschki

Bourbon

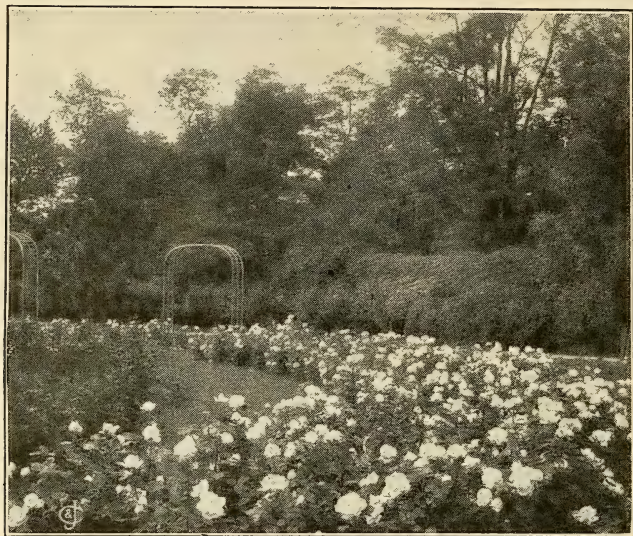
Souv. de la Malmaison

Hybrid Teas

Augustine Guinoisseau
Amateur Teyssier
Chateau de Clos Vougeot
Dean Hole
Duchess of Wellington
Earl of Warwick
General-Superior Arnold Janssen
General MacArthur
George C. Waud
Gruss an Teplitz
Gustav Grunerwald
Joseph Hill
Königin Carola
Lady Alice Stanley
Lady Ashtown
Lady Greenall
Laurent Carle
Lieut. Chauré
Mabel Drew
Mme. Abel Chatenay
Mme. Jules Bouché

Mme. Jules Grolez
Mme. Leon Pain
Mme. Melanie Soupert
Mme. Ravary
Mme. Segond Weber
Marquise de Sinety
Mrs. Aaron Ward
Mrs. Amy Hammond
Mrs. A. R. Waddell
Mrs. Charles Hunter
Mrs. Edward Powell
Mrs. George Shawyer
Mrs. Harold Brocklebank
Mrs. Theodore Roosevelt
Pharisäer
Prince de Bulgarie
Radiance
Souv. du Pres. Carnot
St. Helena
Viscountess Folkestone

*Admiral Aaron Ward, a really great rosarian, died July 5, 1918. The notable introductions of the past four years would displace only a few from the list of roses he most prized.



Rose-beds of one variety make a fine effect

For Philadelphia and Vicinity

Dr. Robert Huey, the eminent amateur whose success has been an inspiration to many others, and who is broadly recognized as an authority on garden roses, recommends the following varieties:

Hybrid Teas

Antoine Rivoire
 Betty
 Duchess of Wellington
 Ellen Willmott
 George C. Waud
 Joseph Hill
 Killarney
 Lady Alice Stanley
 Lady Ashtown
 Laurent Carle
 Los Angeles
 Lyon
 Mabel Drew
 Mme. Edouard Herriot
 Mme. Caroline Testout
 Mme. Hector Leuillot

Mme. Jules Bouché
 Mme. Leon Pain
 Mme. Melanie Soupert
 Mme. Segond Weber
 Mrs. Aaron Ward
 Mrs. A. R. Waddell
 Mrs. Harold Brocklebank
 Mrs. MacKellar
 Ophelia
 Pharisäer
 Prince de Bulgarie
 Radiance
 Robert Huey
 Viscountess Folkestone
 Willowmere

Roses for Philadelphia and Vicinity, continued

Hybrid Perpetuals

Baroness Rothschild
 Captain Hayward
 Frau Karl Druschki
 George Arends
 Oskar Cordel

Mrs. John Laing
 Mrs. George Dickson
 Susanne-Marie Rodocanachi
 Ulrich Brunner

Tea Roses (Hardy)

Harry Kirk
 Hugo Roller
 Lady Hillingdon
 Maman Cochet

Safrano
 White Maman Cochet
 Wm. R. Smith

Climbing and Pillar Roses

Aviateur Bleriot
 Christine Wright
 Dorothy Perkins
 Dr. W. Van Fleet
 Elisa Robichon

Excelsa
 Gardenia
 Hiawatha
 Reine Marie Henriette
 Tausendschön

For Washington, D. C., and Points South

Dr. W. Van Fleet has for many, many years been a distinguished student of the rose. American Pillar, May Queen, Ruby Queen, Mary Lovett, Bess Lovett, Alida Lovett, Silver Moon, and Dr. W. Van Fleet are a few of his hybridizing. Now associated with the Department of Agriculture, he is hybridizing them to fit the needs of the American people. From such an authority do we offer the following list for warm climates:

Pink

Killarney, H.T.
 Mme. Abel Chatenay, H.T.
 Mme. Gabriel Luizet, H.P.
 Maman Cochet, T.
 Mrs. John Laing, H.P.
 My Maryland, H.T.
 Paul Neyron, H.P.
 Radiance, H.T.
 Wm. R. Smith, T.

Red

Cardinal, H.T.
 Etoile de France, H.T.
 General MacArthur, H.T.
 Gruss an Teplitz, H.T.
 J. B. Clark, H.P.
 Red Radiance, H.T.
 Richmond, H.T.
 Ulrich Brunner, H.P.

Yellow

Etoile de Lyon, T.
 Lady Hillingdon, T.
 Sunburst, H.T.

White

Frau Karl Druschki, H.P.
 Gloire Lyonnaise, H.P.
 Kaiserin Auguste Victoria, H.T.
 Killarney, White, H.T.
 White Maman Cochet, T.

For Chicago and the North

By W. C. EGAN

EDITOR'S NOTE.—People who live in the cold Northwest may think it useless to attempt growing roses, but, as Dr. Bailey says, "the success of the rose in this country is very largely a question of the selection of adaptable varieties." The Lake Forest section, on the west shore of Lake Michigan and north of Chicago, is typical of a large area to the north and west. In this section there is no one better able to speak from broad experience than W. C. Egan, the eminent horticulturist of Highland Park. In response to our request for a list of roses best suited to his cold country, he very generously sent us a contribution which, without further comment, we are most happy to present to our readers.

While the section bordering Lake Michigan from Chicago northward, called the North Shore district, is not a rosarian's paradise, we can have roses from early June until frost. This we can accomplish with but little care, except in the case of the Hybrid Teas, which require proper attention. Given this, they flood us with a shower of bloom that makes them worthy of cultivation, even if we treat them as annuals, and plant fresh stock each year. "Expensive!" you say. Well, yes, to a certain extent; but so are bedding-plants, and babies, and automobiles; but the results in all cases are worth the money. Some spend money lavishly for winter decorations that fade in the night. The same amount, spent for Hybrid Teas planted out early in the spring, gives one pleasure all summer. They are easily cared for, if the instructions given in this work are carried out. For those who possess small grounds and have but little time to attend to them we have that poor man's blessing, the *Rosa rugosa*, and its hybrids. This Japanese rose does not know how to "catch cold," and will stay longer with you and give far more pleasure than any poor relation. It blooms profusely in June and scatteringly all through summer, ripening its bright red, cherry-like berries during the late summer months. Its foliage is unusually fine and insect-proof. This feature alone should be highly appreciated, for the beauty of foliage is more than half the beauty of any plant. This rose was known to rosarians as early as 1845, but its beauty and hardiness

and its value in hybridizing were not appreciated until some forty years afterward, when Mr. Robert C. S. Carman, of New Jersey, and M. Georges Bruant of Poitiers, France, gave us the hybrids, Agnes Emily Carman, and Mme. Georges Bruant. While the former was produced first, thus giving the honor of producing the first Rugosa hybrid to an American, it was delayed in its propagation, and the French rose was the first on the market. In all of Mr. Carman's experiments the Rugosa rose was the mother plant, and it is a singular fact that the Agnes Emily Carman rose, bearing flowers having the color and scent of the General Jacqueminot rose, should have Harison's Yellow as the male parent. The success of these hybridizers caused others to enter the field, and we now have a host of good forms, all hardy and reliable. Where these hybrids possess some Tea blood, unusually cold winters may kill them back somewhat. The handsome Rugosa hybrid, Conrad F. Meyer, is sometimes "cut back" in winter. This type and its hybrids are splendidly adapted for forming entire hedges or large groups, and may be depended upon for flower and foliage.

The well-known dwarf rose, Hermosa, and the writer made their first appearance before the public at about the same time, and the former has graced our gardens for seventy-five years. It is reliable and hardy with but little protection, and is one of the best bedders today. The same may be said of the Clothilde Soupert, one of the largest-flowered forms of the Polyantha class, introduced in 1884. In 1880, Veuve Ducher introduced the charming dwarf Polyantha, Mlle. Cecile Brunner, the queen of the so-called Fairy rose class, hardy with slight protection, and admirable for corsage bouquets. Its miniature buds, so delightfully tinted, are admired by all, especially by the gentler sex.

Who has not admired the Cherokee rose of the southern states, an escaped exotic, being the Chinese *Rosa sinica*, that has taken so kindly to the conditions offered as to thrive there on the waysides and fence corners? We of the North can have its counterpart, all except its evergreen foliage, in the extremely hardy *Rosa spinosissima* var. *Altaica*,

from the Altai Mountains in Siberia. When in bloom, it is a charming sight in the purity of its single, pure white flowers. I cannot understand why this rose is scarce and hard to find, as in good soil it suckers rapidly and thus an increased stock is easily obtained.

The old-fashioned Sweetbriar, with its heaven-born perfume, often winter-kills here, but I grow it in among some tall-growing barberries through whose branches the Briar thrusts its long canes. The barberry shades the Briar canes in winter and but little loss occurs.

I tried Lord Penzance hybrids and, much to my regret, could not carry them over winter, so the charming Lady Penzance was banished from "Egandale."

The Persian Yellow and Harison's Yellow, as well as all the Mosses, are hardy here.

All of the Baby Ramblers do well here, slightly protected, and are well fitted for borders of large rose-beds. *Ænnchen Müller* is splendid; as a cut-flower, each well-grown truss is a bouquet in itself; and, the flowers being loosely arranged, give an airy elegance to the decoration. The color is good in daylight or electric,—a desirable quality in any flower.

Hybrid Perpetuals and those grown as such require winter-protection. Some stand this covered-up condition better than others. Here is a list I gave in Bailey's "Cyclopedia of American Horticulture" some years ago, and I would not change it now. Undoubtedly, there are many more that will do as well if tried, but there are enough listed to create a garden for anyone.

The winter of 1898-1899 was the most severe in this section I ever experienced, and many trees and shrubs, considered "iron-clad," were killed. The following is a list of roses which wintered here under protection and which came out in good condition:

Captain Christy
 Captain Hayward
 Garden Favorite
 General Jacqueminot
 John Hopper
 La Rosiere

Louis Van Houtte
 Magna Charta
 Mrs. Paul
 Mrs. R. G. Sharman-Crawford
 Paul Neyron
 Prince Camille de Rohan

Deserving of more general use is the *RUGOSA* family of Roses, with foliage, flowers and fruit each an ornament to a most hardy and satisfactory shrubby plant of fine habit



The following eleven were in fair condition and recovered their form during the season:

Alfred Colomb
Anna de Diesbach
Baronne Provost
Countess of Oxford
Eugene Furst
Lyonnaise

Mme. Gabriel Luizet
Mme. Victor Verdier
Pierre Notting
Prince of Wales
Ulrich Brunner

This section, together with many in the northern states, suffered for the want of a suitable number of climbing roses that might be carried over the winter with an easily prepared protection, until the advent of the Crimson Rambler, which reached England from Japan in 1878. This was followed soon after by *Rosa Wichuraiana* and its hybrids. Up to this time we had to be content with Queen of the Prairie, Baltimore Belle, Russell's Cottage, and Multiflora rose Greville, or Seven Sisters. The first two were produced by Feast of Baltimore in 1843 by hybridizing that most excellent hardy Prairie rose, *R. setigera*, with some of the garden forms of the day. I have often wondered why hybridizers had not used this hardy semi-climbing rose more frequently in their work. About all the climbing roses, bearing a large percentage of Rugosa or Wichuraiana blood, are hardy with a slight protection in winter. Which is the best is merely a matter of choice.

The new, prostrate rose, Max Graf, may be used as a climber and is hardy without protection. Grown without support, it lies close to the surface, thus making a splendid ground-cover. In beds, well established, the new canes will rise up some 18 inches and then, arching over, rest their tips upon the ground. Planted at the top of a wall they hang over like a veil. The bright green foliage indicates a mixture of the Rugosa and Wichuraiana blood and is attractive all summer and fall. Free from mildew or insect pests. In its blooming season, June and July, it is covered with a clear pink flower similar in color, size and substance to the pink Rugosa.

EDITOR'S NOTE.—Mr. Egan has also made careful test of the leading Hybrid Teas, both for their blooming qualities and also for hardiness and suitability for his climate. He planted three plants each, did not disbud, and the second summer out, which was a hot and trying one, he cut as shown in this report:

NAME OF VARIETY	Av. Blooms prior to Aug. 1	Av. blooms after Aug. 1	Av. blooms per plant for whole season
1. Ecarlate	43 $\frac{1}{3}$	75	118 $\frac{1}{3}$
2. Killarney	27	25 $\frac{2}{3}$	52 $\frac{2}{3}$
3. La Tosca	26 $\frac{2}{3}$	18 $\frac{1}{3}$	45
4. Grossherzog Friedrich	19 $\frac{2}{3}$	25	44 $\frac{2}{3}$
5. Radiance	26	16	42
6. Lady Ashtown (two plants)	17	17 $\frac{1}{2}$	34 $\frac{1}{2}$
7. Ophelia	16 $\frac{1}{3}$	18 $\frac{1}{3}$	34 $\frac{2}{3}$
8. Majestic	18	15	33
9. Mrs. A. R. Waddell	16	15 $\frac{2}{3}$	31 $\frac{2}{3}$
10. Mrs. Aaron Ward	14	17 $\frac{1}{3}$	31 $\frac{1}{3}$
11. Lady Ursula	18 $\frac{1}{3}$	12	30 $\frac{1}{3}$
12. Duchess of Wellington	8	22 $\frac{1}{3}$	30 $\frac{1}{3}$
13. Florence Pemberton	10 $\frac{2}{3}$	19 $\frac{1}{3}$	30
14. Pharisäer	15 $\frac{1}{3}$	13	28 $\frac{1}{3}$
15. Viscountess Folkestone	13	13 $\frac{1}{3}$	26 $\frac{1}{3}$
16. Souv. de Gustave Prat	10 $\frac{2}{3}$	15	25 $\frac{2}{3}$
17. Mme. Caroline Testout	14 $\frac{2}{3}$	10	24 $\frac{2}{3}$
18. Lady Alice Stanley	13 $\frac{1}{3}$	10 $\frac{1}{3}$	23 $\frac{2}{3}$
19. Mme. Leon Pain	9 $\frac{1}{3}$	14	23 $\frac{1}{3}$
20. Prince de Bulgarie	12	11 $\frac{1}{3}$	23 $\frac{1}{3}$
21. Gustav Grunerwald	9	14	23
22. General MacArthur	8 $\frac{1}{3}$	13 $\frac{2}{3}$	22
23. Lieutenant Chauré	10 $\frac{2}{3}$	11	21 $\frac{2}{3}$
24. Willowmere	14 $\frac{2}{3}$	7	21 $\frac{2}{3}$
25. Lady Pirrie	10	10 $\frac{1}{3}$	20 $\frac{1}{3}$
26. Duchess of Westminster	10 $\frac{1}{3}$	9 $\frac{1}{3}$	19 $\frac{2}{3}$
27. Laurent Carle	8 $\frac{2}{3}$	10 $\frac{2}{3}$	19 $\frac{1}{3}$
28. Mme. Ravary	8 $\frac{1}{3}$	9 $\frac{2}{3}$	18
29. Farbenkönigin	10	7 $\frac{1}{3}$	17 $\frac{1}{3}$
30. Antoine Rivoire	12	4 $\frac{2}{3}$	16 $\frac{2}{3}$
31. Dean Hole (first year)	4	12 $\frac{2}{3}$	16 $\frac{2}{3}$
32. Mme. Jules Bouché	6 $\frac{2}{3}$	9 $\frac{2}{3}$	16 $\frac{1}{3}$
33. Earl of Warwick	7	8 $\frac{2}{3}$	15 $\frac{2}{3}$
34. Mme. Melanie Soupert	9	5 $\frac{2}{3}$	14 $\frac{2}{3}$
35. Mrs. Wakefield Christie-Miller	9	5	14
36. Mrs. F. W. Vanderbilt	6	7 $\frac{2}{3}$	13 $\frac{2}{3}$
37. Jonkheer J. L. Mock (buds come bull-headed)	4 $\frac{2}{3}$	8 $\frac{1}{3}$	13
38. Mme. Jenny Gillemot	6 $\frac{1}{3}$	6 $\frac{1}{3}$	12 $\frac{2}{3}$
39. Chateau de Clos Vougeot (weak grower)	6	5 $\frac{2}{3}$	11 $\frac{2}{3}$
40. Mme. Edmond Rostand	5 $\frac{2}{3}$	5 $\frac{1}{3}$	11
41. Mrs. George Shawyer	4	6 $\frac{2}{3}$	10 $\frac{2}{3}$
42. Louise C. Breslau	7	$\frac{2}{3}$	9 $\frac{2}{3}$



In Elizabeth Park Rose-garden, Hartford, Connecticut

The Increasing Regard for Roses

In his book, "The Cultivated Man," Charles W. Eliot says: "A brook, a hedge-row, or a garden is an inexhaustible teacher of wonder, reverence, and love."

Another one of "America's noblemen," G. A. Parker*, with exquisite feeling, thus portrays the possible influence of the rose on the lives of men, when, in telling of the rose-garden at Elizabeth Park, he says:

"I have come to think of beauty as the love-letter of the Creator, through which He is wooing us unto Himself; for beauty is spiritual, and not physical.

"A love-letter is a message into which the sender puts a part of his very self, and the one who receives it, in some mysterious way, weaves it into a part of his very life. It matters little what words are used or how the message is sent, providing it becomes a part of the sender and of the receiver. Surely the Creator uses a most beautiful form when He avails Himself of the roses to convey His message."

Among the real rose-lovers now scattered widely over our great country, it is difficult to conceive of a finer loyalty than already exists toward the flower of their choice. Such devotion as theirs is bearing fruit. Better roses in their gardens are arousing more abundant admiration on the part of neighbors. This results in more "recruits." Rose societies spring up here and there. The members help each other, and more and more each one comes to know the joy of growing one's own roses. This is just what has been going on in many sections of our great country. The delights of rose-growing have been revealed to vastly increasing numbers of amateurs within the past few years. The "garden magazines" have helped. The "garden clubs" have been a prominent factor.

There are, perhaps, half a dozen rose men lecturing† on this fascinating subject and forwarding the good work. All have helped, and the combined efforts of these various agencies are beginning to bloom into activities of great promise.

*"American Rose Annual," 1916, pages 71, 72.

† A list of these will be furnished on request.

The American Rose Society

aims "To increase the general interest in the cultivation and improve the standard of excellence of the rose for all people."

Whether you grow one rose or acres of them (whether you are an amateur or professional), you will find it delightfully profitable to belong to the American Rose Society. Already nearly 2,000 folks seem to have found it so, and are sending in the names of their friends from every part of our great country.

The highest ambition of the American Rose Society is to serve its members. This it strives earnestly to do.

It stimulates and fosters the holding of exhibitions in every available rose center, and heightens the interest by awarding—Gold, Silver, and Bronze Medals, or Certificates of Merit for prize exhibits.

It holds annually one or more rose exhibitions, usually in connection with some large flower-show.

Tickets for such shows are sent free to all members.

Local societies are organized, in affiliation with the parent body, with consequent advantages to associate members.

A complete file of available roses and registry of new ones of merit is constantly maintained, preparatory to the publication of an official catalogue in the near future.

Important rose test-gardens are established at Hartford, Conn.; Washington, D.C.; Ithaca, N. Y.; Minneapolis, Minn.; and Portland, Ore.

Results obtained in each separate climatic zone are thus available for the enlightenment of members.

The American Rose Society also publishes the American Rose Annual. It is ably edited by J. Horace McFarland, of Harrisburg, Pa., and is available to members only. It contains, each year, a comprehensive record of rose progress in America, with original, helpful, up-to-date information. It is beautifully illustrated in color and sepia, and contains about 180 pages.—*Membership* is annual, at \$2, and life, at \$50.

For further information or enrollment, address

Editor, "How to Grow Roses," West Grove, Pa.

Fragrant Roses

By DR. W. VAN FLEET

"Agreeable fragrance is one of the most valued attributes of the perfect rose, though many indispensable species and varieties do not possess it in marked degree, and not a few are either odorless or even distasteful to the sense of smell. . . .

"The wild roses of North Europe mostly have faint fragrance or are scentless and the same may be said of our Middle West and Pacific Coast species, though there are a few exceptions in the extreme Northwest. . . .

"True rose-fragrance arises from the presence of rose-oil or attar, a volatile oil elaborated in the petals of the blooms just before opening. It appears most abundantly in the cells near the base of the petals, yet is present in such small quantities that it usually requires a ton and a half of fresh plucked rose petals to produce a pound of oil which resembles brownish butter.

"Roses of the hardy, free-flowering *Rugosa* type from Japan, which grow well in America, typify rose-perfume in its most pleasing form. Some of the hybrid *Rugosas* are also very fragrant, while others, although fragrant, have not the intense fragrance of the single-flowered *Rosa rugosa rubra* (red) and *R. rugosa alba* (white).

"Attar of roses is secured from the fresh petals of fragrant roses by the ordinary process of distillation and condensation used to recover all essential or volatile oils produced in nature. It exists in such small quantity, however, even in the best perfume varieties, that it remains in solution in the water of condensation that comes over from the still and must be washed out or redistilled several times before it may be skimmed off, as with more abundant oils. These first waters, however, are most deliciously scented, and, in this country at least, would be more valuable as true commercial rose-waters than the attar itself when extracted from them.

"There is one remaining entrancing rose-odor—the despair of perfumery chemists—that of the Sweetbrier foliage after a rain. It cannot be recovered by any known process and lives and dies with the occasion during which it is perceived. . . .

"Rose aromas are not congenial to all persons, and occasionally an individual is found to whom they are annoying, and even hurtful, in the way of causing catarrhal symptoms; but to the overwhelming majority of gardeners, fragrance is a prime requisite for the thorough enjoyment of a rose bloom."

EDITOR'S NOTE.—As a sample of the character of the 1919 "American Rose Annual," these extracts from pages 14-19 are published here by permission of the Editor, J. Horace McFarland, Harrisburg, Pa.



Large, fragrant flowers, of rich color, and sturdy growth, has the Hybrid Perpetual, ULRICH BRUNNER

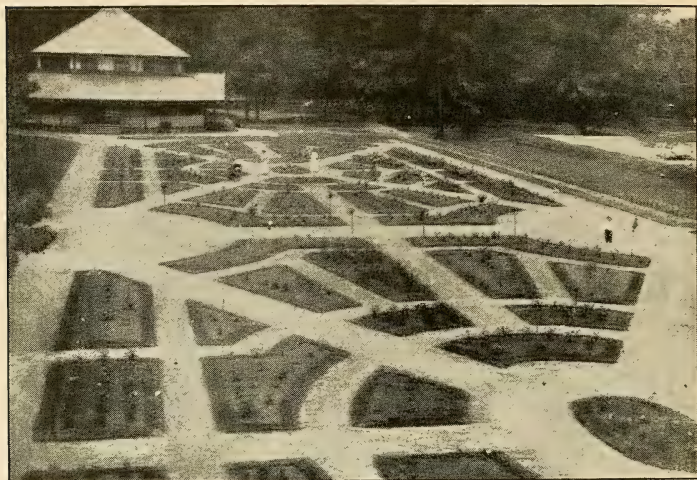
Municipal Rose-Gardens

Hartford, Connecticut, was the pioneer for America; and she builded well. Starting in 1904, in Elizabeth Park, there were laid out one and one-quarter acres. This the author visited first upon his return from a tour among the more prominent rose-gardens in England, Ireland, Holland, Germany, and France. While delighted with the cultural success and magnificent show of varieties, there seemed in the *ensemble* much to be desired in the matter of treatment and arrangement. This will probably be true of most of the test-gardens referred to in the above section, because beauty of landscape effect is not the first thing sought for in a rose-garden made primarily for test purposes, although the more there is of grace and beauty, of charm and enchantment, by reason of the arrangement, of course, the better it is.

But Hartford led the way, and nobly continues to render this nation, at least the northeastern part of it, a great service. She showed that even a little public rose-garden, well done, begets enthusiastic public appreciation. Mr. G. A. Parker, Superintendent of Parks, of Hartford, reports 116,000 people having visited this rose-garden in one year. There are in it three hundred different varieties of roses and about fifteen hundred separate plants, and the cost, both for construction and maintenance, in eleven years has been \$0.0173 per visitor. But as for its influence upon, and value to, the people who have come to see it, no money estimates can be made. If any reader feels inclined to doubt this last statement, permit us to suggest that he submit his feelings to the test of a visit.

There are many American cities which have roses in their parks, and these cities are extending their plantings; but as yet only a limited number have definitely set apart, and regularly arranged for, a real rose-garden.

If any of our readers have the opportunity to visit Portland, Oregon, certainly one of the sights of that city of wonderful promise is the municipal rose-garden. It is larger, perhaps, than that of Hartford,—a sunken garden with rose-



Municipal Rose-garden, Cleveland, Ohio. One year old

covered terraces; a fountain-centered system of walks and a large amount of growth; and, as nearly every rose-lover knows, a gratifyingly long season of bloom. It is, we believe, true of Portland, as of no other city, that the commercial men have long realized the value of the rose and its exploitation as an indirect, though very definite means of spreading, world-wide, the fame of that rose-favored corner of the earth. This is a reason why there is enthusiasm in Portland back of the conception to establish in another part of the city another municipal rose-garden that shall outclass any other in America. And why should Portland *not do so*? The author would enjoy telling his readers much more about the magnificent hedges of roses in Portland; of the great annual rose-festivals, with electrical displays; of many different parades; of automobiles; of the Royal Rosarians and their Queen of the Roses with her attendants,—all doing homage to the rose.

In 1915, at Cleveland, Ohio, for the first time there appeared on display a most creditable municipal rose-garden, its success being due in large measure, doubtless, to the able hand of their superintendent of parks. No climbing

roses surrounded it when the author enjoyed its rich June bloom, but the varieties had been well chosen for that locality, and arranged in good taste. All were bush roses and were grouped in beds, with an arrangement of walks making the annually recurring display easily accessible to large numbers of people. Time and growth, with the good care it is sure to get, will furnish the softening and enriching effect that only age can supply. It is a splendid beginning, and such as one would expect of Cleveland.

And so, in sequence, might be mentioned a few other cities whose activities along this line have come to the attention of the author.

Syracuse, N. Y., has now the beginning of a most creditable municipal rose-garden, the result of a demand made by the citizens, promoted by an energetic rose society and its indefatigable president, Rev. E. M. Mills, D.D. Long life to him!

Now, too, we are happy to report the establishment of a real rose-garden in the Bronx Park system of New York City. The New York Horticultural Society and affiliated organizations have carried out creditably a rose-planting that promises to rejoice the hearts of countless thousands of people. Let us all hope that it may prove easily accessible to those who most need the inspiration and pleasure which such a garden is so well calculated to furnish.

And now for the Brooklyn Rose-Garden, the plans are well under way, and excellent progress is being made.



View in the Bagatelle Municipal
Rose-Garden, Paris

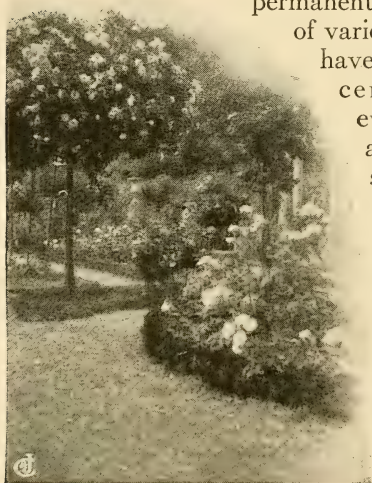


Roses, roses everywhere

A Famous Rose-Garden

The most beautiful rose-garden I have yet found in either America or Europe was near Paris. Accompanied by Mrs. Pyle, I arrived at the Roseraie de L'Hay early one day, and we lingered there till sunset, enchanted. A

permanent rose-garden with thousands of varieties, it includes roses said to have originated in the sixth century B.C. Roses from every continent are arranged and trained in all imaginable styles, from borders of Baby Ramblers to giant Tree roses, 15 feet high and 10 feet spread. Tunnels completely covered with climbing roses form outlooks through the garden, with here a bit of statuary, there a fountain flashing in the sunshine, with roses, roses everywhere, from the broad-



Note this giant Tree rose

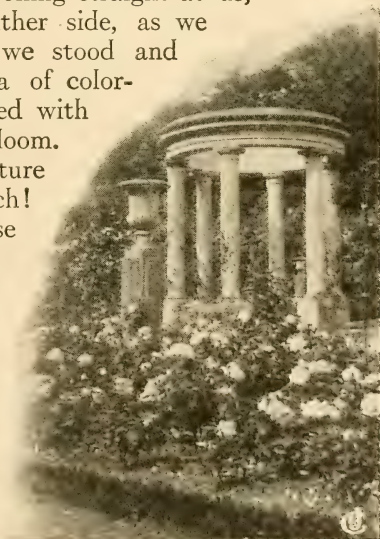


And here we lingered till sunset

petaled, deep red Lion climber to the splendid M. Graver-eaux, named in honor of the owner of this magnificent garden. We strolled down the long, box-bordered pathways, with familiar faces among the roses looking up at us from beds at our feet, and climbers looking straight at us, and half-beckoning from either side, as we passed, until, spellbound, we stood and gazed down the long vista of color-covered beds, back-bordered with still other climbers in bloom.

And this is only one picture out of hundreds of such!

What a love for the rose must have helped to fashion the quiet arbors and festooned balustrades, the archway entrances, artistic screens, and disappearing pathways, so well planned that every turn brought a fresh surprise, each one more entrancing than the other!



The Temple of Love

Finally, so well hidden by an encircling temple of trees that we nearly missed it, was an open-air theater with turf seats, and along the front of the stage, for footlights, was a brilliant row of blooming roses. There, amid this paradise, in charming French fashion, our host entertained his guests with a musical recital. From this garden came the inspiration for starting the Municipal Rose-Garden of Paris in the Bagatelle. Now that Mons. Jules Gravereaux is gone, we realize what a happy memorial it is that his native city should maintain for all time, we hope, this great rose-garden, which he started for the pleasure of his fellow citizens.

[From notes and photographs taken by Robert Pyle, president of The Conard & Jones Co., West Grove, Pa., on the occasion when he represented the American Rose Society and acted as a judge at the International Contest of Garden Roses at Bagatelle, Paris, June, 1911.]

The Red Rose Church at Manheim

We know of no more unique ceremony in America than Manheim's "Feast of Roses." In 1750, Baron Heinrich Wilhelm Stiegel, coming from Germany, settled in Lancaster County, Pennsylvania, and founded the little town of Manheim. He prospered in business and later deeded to the Lutheran congregation (which he organized in 1769) a plot of ground for the erection of a house of worship with the following stipulation: "*yielding and paying therefor at the said town of Manheim, in the month of June, yearly forever after, the rent of ONE RED ROSE, if the same shall be lawfully demanded.*"

And now each year, with appropriate exercises, the congregation of the Manheim Lutheran Church pays to the heirs of Baron Stiegel the unique ground-rent of "one red rose," and each year recalls the memory of a man who, though "dying in poverty, had yet left the noblest of all memorials, the love, reverence, and gratitude of a community whose industry he had stimulated, whose ideals he had fostered, for whose spiritual welfare he had made permanent provision." (Published with the permission of the pastor, Rev. A. E. Cooper.)

Rose-Beads

For the following formula the author is indebted to a good friend of his from New York State, whose experience in making rose-beads is far more extensive than his own.

“Gather the petals of roses—even newly fallen ones will do—till you have, say, half a peck. Grind these through a meat-chopper till they become pulp. In order to have the beads jet-black when finished, place this pulp in an iron pan, or, lacking that, mix in a teaspoonful of ground copperas (ferri sulphas), and stir thoroughly; the mixture will soon become brown. Set it now in the sun or a warm oven till it gets black. After this, put all through the meat-chopper again till it becomes like putty, and then form the beads. They can be made any shape you like,—round, square, hexagonal, etc.,—but form them twice the size you wish to have them when finished. Rolling them into little balls with the hand will make smooth beads. If you wish them figured, the butt-end of a steel writing-pen is a convenient tool, to be used, of course, when the beads are still soft. When properly formed, transfix them to a board with a pin, then keep them hot and dry, and in two or three days they will become small and hard, and may be strung through the hole left when the pin is removed.”

A European authority gives us a slightly different formula, and recommends using a mortar instead of the more prosaic and modern meat-chopper.

“Freshly gathered rose-petals are beaten into a pulp and then dried, but before becoming completely dry, rose-water is added and they are again beaten and dried, the operation being repeated till the pulp has become very smooth. Then the desired shape is given and they are perforated in order to thread them, and so a kind of bead is formed, which is dried. When they have become very hard, they are smoothed and polished, after which they are rubbed with oil-of-roses in order to give them more perfume and gloss. If a brass mortar be used, the pulp takes a deep black color, through the action on the metal of the gallic acid contained in the roses. On

the other hand, if a marble mortar be used, blue and red and other colored beads can be manufactured according to the coloring materials employed. The black beads are most highly prized. They have been manufactured principally at Adrianople, Smyrna, and Constantinople."

Attar of Roses

The reader will notice on another page a short account of a visit made to that most beautiful rose-garden south of Paris, the Roseraie de L'Hay. Many chapters might be written of this little paradise about which clusters so much of interest to a rose-lover. But there is in that wonderful garden a quaint thatched "summer-house," as we in America might call it, rose-embowered. On the occasion of the author's visit, there was at work in the little cottage a white-aproned chemist with large-sized retort, test-tubes, spirit-lamps, and other appliances. The rose-petals which had been gathered in the garden were being reduced to essence or attar of roses. M. Gravereaux has improved the method of extracting the oils, and, furthermore, has proved by extensive experiments that certain perpetual-flowering roses, like Mme. Caroline Testout, and others, are capable of producing a much larger amount of the essence than the Damask and Centifolia roses heretofore largely used.

The method employed by M. Gravereaux is superior to that of the Bulgarians, Persians, and Algerians, whose apparatus is most primitive, as the following will indicate: The rose-petals must be distilled as they are picked, otherwise much of their odor will be lost. They are brought right to the stills, which are made of copper, and there mixed with only water, the quality of which is said considerably to influence the essence distilled. After having twice boiled down the mixture to one-eighth or one-tenth its original volume, it is allowed to cool, and is set in open bowls at a constant temperature. Gradually the essence rises and swims on the surface in yellowish patches, which are skimmed off with a mother-of-pearl spoon. This operation, usually falling upon



BRIDESMAID is most appropriately named, suggestive of what is best among the prettiest pink Tea Roses

the eldest member of the family, is carried out with a solemnity befitting its importance. What this must mean to the peasants is better understood when we realize how feather-light rose-petals are, and that 150 pounds (2,400 ounces) of them ordinarily yield less than one ounce of the essence of the rose.

It is not to be marveled at, therefore, that it is expensive, not alone for the above reason, but also because of its importance in the fabrication of the finest perfumes. It has, furthermore, the valuable quality of increasing and fixing other perfumes, just as the rose itself has the quality of developing in those who work with it qualities of fine moral character.

Hybridizing

This book attempts in no way to cover the subject of hybridizing, save to refer to some sources of information regarding a work that calls for long-sustained attention, and almost limitless patience, with no assurance as to results. Amateurs, as well as professional rose-growers, have made valuable contributions to our lists of roses, and certainly the future must offer more adequate recompense to the successful breeder of roses than has been the case in the past.

Rev. Joseph H. Pemberton*, for the beginner, gives directions that appear to be easily followed by one who has the time and facilities to undertake the work.

Every hybridizer will be interested also in the articles by Dr. White and Dr. Van Fleet in "The American Rose Annual" for 1916; also in the "Stammbuch der Edelrosen," by Dr. G. Kruger. The edition of this work, published in 1906, at Trier, Germany, contains a most complete listing of the hybridized roses in commerce, including parentage, hybridizer, and date of issue. For example, under Mme. Caroline Testout, are given fifty-eight immediate descendants, showing also the name of the other parent in all except nine cases. It would seem to be an invaluable work for anyone who wishes to undertake hybridizing.

*"Roses," page 229 (see Bibliography).

Bibliography

Beginning with "The Rose Manual," by Robert Buist, in 1884, there have been issued in America at least eighteen different works, the most noteworthy of which we list below:

THE ROSE. By H. B. Ellwanger. 1882. 293 pp. Dodd, Mead & Co., New York. This was long the standard rose book.

A BOOK ABOUT ROSES. By S. Reynolds Hole. 1883. 326 pp. Wm. S. Gottsberger, New York. An American reprint of a standard English work. Highly entertaining work on roses, and most inspiring.

ROSES AND HOW TO GROW THEM. Collected magazine articles. 1910. 199 pp. Doubleday, Page & Co., Garden City, N. Y.

COMMERCIAL ROSE-CULTURE. By Eber Holmes. 1911. 165 pp. A. T. de la Mare Printing and Publishing Company, New York.

EVERBLOOMING ROSES FOR THE OUTDOOR GARDEN. By Georgia T. Drennan. 1912. 262 pp. Duffield & Co., New York.

THE PRACTICAL BOOK OF OUTDOOR ROSE-GROWING. By George C. Thomas, Jr. 1914. 156 pp. and 96 plates in color, etc. J. B. Lippincott Company.

THE AMERICAN ROSE ANNUAL. 1916, 1917, 1918, 1919, 1920. Published by the J. Horace McFarland Company, Harrisburg, Pa., for The American Rose Society. Contributions upon roses, rose-growing and rose-gardens. Recounts the year's activities. Free to members only.

The following are all edited from the English standpoint:

ROSES: THEIR HISTORY, DEVELOPMENT, AND CULTIVATION. By Rev. Joseph H. Pemberton, Vice-President of the National Rose Society. 1908. 336 pp. Longmans, Green & Co., London and New York.

ROSES AND ROSE-GROWING. By Rose G. Kingsley. 1908. 163 pp., 28 full-page color-plates. The Macmillan Company, New York and London. With special attention to the best roses in each of the various classes, regarded from the English viewpoint.

ROSES FOR ENGLISH GARDENS. By Gertrude Jekyll and Edward Mawley. 1902. 164 pp. George Newnes, Ltd., London. Although relating to English gardens, it is, nevertheless, most entertaining, and by its thoroughness helps to clear up many questions left unanswered by other authorities.

ROSE-GROWING MADE EASY. By E. T. Cook. 200 pp. Another English publication, suggestive and helpful, and written apparently by one with long years of first-hand experience.

THE ROSE BOOK. A complete guide for amateur rose-growers by H. H. Thomas. 1913. 283 pp. Profusely illustrated. Treats well the various uses to which roses may be put.

THE BOOK OF THE ROSE. By Rev. A. Foster-Melliar, M.A. 352 pages, 33 illustrations. Macmillan & Co. 1902. A comprehensive and inspiring authority covering well the entire subject, for the use of the amateur.

For a list of rose-books in all languages the "Cyclopedia of American Horticulture" refers us to the "Bibliografia de la Rosa," Vergara, Madrid, 1892.

Synonymous Roses

Some roses have acquired new names that seem to be an improvement; for example, Dutch Beauty in place of Veluwezoom. Another case is Mme. Norbert Levavasseur; when once planted and thoroughly domesticated, she answers to the name of Red Baby Rambler. But, if you wish to order Red Baby Rambler, remember there are nearly half a dozen roses so called; so, if you want to be certain, refer to the following list for guidance. Renaming a rose with intent to deceive has come to be regarded by rosarians as a crime. When a second name is adopted for the sake of euphony, the original name should be carried in parentheses.

Anna de Diesbach	H.P.	Gloire de Paris
Baby Dorothy, Pink	P.	Maman Levavasseur
Baby Rambler, Pink	P.	Maman Levavasseur
Baby Rambler, Red	P.	Mme. Norbert Levavasseur
Baby Rambler, White	P.	Katharina Zeimet
Baby Rambler, Yellow	P.	Etoile de Mai
Baby Tausendschön	P.	Louise Walter
Baby Tausendschön	P.	Echo
Ball of Snow	H.P.	Perle des Blanches
Dorothy Dennison	W.	Lady Godiva
Dorothy Perkins	H.W.	Lady Gay
Dorothy Perkins, Red	H.W.	Excelsa
Dutch Beauty	H.T.	Veluwezoom
Green Rose	C.	Viridiflora
Killarney, Striped	H.T.	Spectacular
Killarney, Orange	H.T.	Duchess of Wellington
La France, Red	H.T.	Duchess of Albany
La France, Striped	H.T.	Mme. Angel Vaysset
La France, White	H.T.	Mlle. Aug. Guinoisseau
La Reine des Neige	H.P.	Frau Karl Druschki
Magnolia Rose	T.	Devoniensis
Maman Cochet, Yellow	H.T.	Mme. Derepas-Matrat
Maman Levavasseur	P.	Baby Dorothy
Mignon	P.	Mlle. Cecile Brunner
Mrs. W. H. Cutbush	P.	Mrs. Taft
Mrs. W. J. Grant	H.T.	Belle Siebrecht
Prima Donna	H.T.	Mme. P. Euler
Prince Camille de Rohan	H.P.	La Roseire
Queen, Thé	T.	Souv. de S. A. Prince
Rambler, Golden	N.	Alistair Stella Gray
Rambler, Pink	Mult.	Euphrosine
Rambler, White	Mult.	Thalia
Rambler, Yellow	Mult.	Aglaia
Sweetheart	P.	Mlle. Cecile Brunner
Thousand Beauties	Mult.	Tausendschön
Virginia R. Coxie	H.T.	Gruss an Teplitz
White American Beauty	H.P.	Frau Karl Druschki
Wm. R. Smith	T.	Charles Dingee
Wm. R. Smith	T.	Jeannette Heller

N.B.—See also common names to rose species, foot of page 107.

Analysis of Species

It is doubtful if anyone will have come thus far in this little book, who is not, with the author, a real *seeker after truth*. Just as the story of man becomes doubly interesting as we trace back his development from the earlier types of man, so with the rose. A present-day Radiance or Rayon d'Or is a vastly more fascinating object of attention when one can go to another corner of the garden and point out to visitors the true progenitor of that race. Hybridizing deserves a complete chapter of its own. Right here let us study what *has been done* by the guiding hand of man. Family charts are a useful aid in pointing out relationships. A diagram may be more illuminating than many pages of description. Therefore, as an introduction to the various best-known classes, pause a moment to survey* this analysis of species on the two following pages. This the author conceives to be a most helpful outline of the many, many families that make up this interesting race of flowers.

In this book there has not been room to describe the rose species. We would, however, call special attention to certain "types" which we have starred in the following list. Their place is not in a bed with the Teas or Hybrid Teas. Consider for example, Hugonis—that recent acquisition from China. In three seasons it will be 4 to 5 feet high and in bloom two weeks earlier than the early-blooming Harison's Yellow. And so with others: they are unique, hardy, vigorous. They need only to be fittingly placed to give to the garden a charm and distinction quite above the ordinary.

*The following two pages are published here with permission and by courtesy of Longmans, Green & Co., New York., from their book, "Roses: Their History, Development, and Cultivation," by Rev. J. H. Pemberton (see page 105).

The reader will note how far removed from the original species are both the Tea and Hybrid Tea families, whereas, from many species there has been almost no development at all.

Equivalents of our common names to some of those on next pages:

Champney	Noisettiana	Moss	Muscosa
Cherokee	Lævigata	Musk	Moschata
Dog	Canina	Prairie	Setigera
Eglantine	Rubiginosa	Scotch	Spinosissima
Memorial	Wichuraiana	Sweetbriar	Rubiginosa

ANALYSIS OF SPECIES

DIVISION	SPECIES	SUBSPECIES	HYBRIDS
Synstylæ	Arvensis	Ayrshire	Dundee Rambler
	Moschata	Brunonii	.....
	Multiflora (simplex)	Grandiflora	.....
		Moschata alba	.....
		Pissardii	.....
	Setigera	Rubrifolia*	{ Aglaia Crimson Rambler De la Grifferei
Stylosæ	Sempervirens	.....	{ Leopoldine d'Orleans Felicite et Perpetue
	Wichuraiana	.....	{ Jersey Beauty Dorothy Perkins
	Stylosa	.....	.....
Indicæ	Indica	Indica sanguinea	{ Bourbons Noisettes Chinas
	Semperflorens	.....	Tea-scented
		Indica odorata	Manetti
Gallicæ	Gallica	{ Damascena Centifolia or Provence	{ York and Lancaster
			Cabbage { (Hybrid Perpetual)
			Four Seasons
Banksiæ	Banksia*	Muscosa	Moss
		Alba	Maiden's Blush
		.....	Marie Leonidas

Hybrid Tea

ANALYSIS OF SPECIES, continued

DIVISION	SPECIES	SUBSPECIES	HYBRIDS
Caninae	{ Canina Rubiginosa* Tomentosa Villosa }	Macrantha	.....
		Pomifera	.....
	
	
Cinnamomeae	{ Cinnamomea Alpina Macrophylla Acicularis Rugosa . . . . . }	.....	.....
	
	
	
Carolineae	{ Carolina }	Rugosa alba	Americana
		Rugosa rubra	Mme. Georges Bruant Conrad F. Meyer*
Spinosissimae or Pimpinellifoliae	{ Spinosissima* Involuta Xanthina* Ecæ }	Lucida	.....
		Altaica* . . . . .	.....
		Hibernica . . . . .	.....
	
Lutea	{ Sulphurea Lutea . . . . . }	.....	.....
	
Sericeae	{ Sericea Minutifolia Bracteata (Macartney)* } Laevigata* Microphyllae Simplicifoliae Hugonis	Austrian Copper*	Harisonii
		Austrian Yellow*	Persian Yellow
	
	
Marie Leonida	{ Bracteata (Macartney)* } Laevigata* Microphyllae Simplicifoliae Hugonis . . . . .	.....	.....
	
	
	
Sinica	{ Bracteata (Macartney)* } Laevigata* Microphyllae Simplicifoliae Hugonis . . . . .	.....	.....
	
	
	

Roses Arranged in Classes

In order that the various classes may be studied better as to their characteristics, we hereunder group the more important varieties. French, German, and English authorities differ somewhat in placing a few kinds. Regarding the following lists, however, they are in substantial agreement. In case of differences we have relied upon the country of origin as our authority, e.g., Harison's Yellow.

Alba

*Mme. Plantier

Austrian Briar, or Lutea

Austrian Copper
Austrian Yellow

*Harison's Yellow
*Persian Yellow

Hybrid Austrian Briar, or Pernetiana

Beaute de Lyon
Constance
*Juliet

Louise Catherine
Breslau
*Mme. Edouard Herriot

Muriel Dickson
*Rayon d'Or
*Soleil d'Or

Bengal

Archduke Charles
Douglass

Lucullus
Maddalena Scalarandis

Bourbon

Appoline
*Beauty of Rosemawr
Burbank

*Champion of the World
*Mme. Eugene Marlitt

Santa Rosa
*Souv. de la Malmaison

China

Agrippina
*Birdie Blye (Heart
of France)

*Hermosa
Pink Daily

*Queens Scarlet
Viridiflora†

Damask

Mrs. O. G. Orpen

*York and Lancaster

Hybrid Perpetual

Alfred Colomb
Alphonse Soupert
*American Beauty
*Anna de Diesbach†
Antoine Wintzer
Ards Rover
Ball of Snow
Barbarossa
Baroness Rothschild

Baron de Bonstetten
Belle d'Orleans
Candeur Lyonnaise
Captain Christy
Captain Hayward
Charles Wagner
Cheshunt Hybrid
*Clio
Commander Jules
Gravereaux

Coquette des Alpes
Coquette des Blanches
Eugene Furst
Francois Levet
*Frau Karl Druschki†
*General Jacqueminot
George Arends
Giant of Battles
*Gloire de Chedane
Guinoisseau

REFERENCE MARKS EXPLAINED

The asterisk (*) indicates leading varieties described on pages 43 to 62.

The dagger (†) indicates roses with two names and refers to list of synonymous roses,

Hybrid Perpetual Roses, continued

Gloire de Margottin	Mme. Charles Wood	Oakmont
*Gloire Lyonnaise	Mme. Masson	Paula Clegg
Glory of Paris	Mlle. Louise Crette	*Paul Neyron
Heinrich Munch	*Magna Charta	*Prince Camille de Rohan†
*Hugh Dickson	Marchioness of Lorne	Rembrandt
*J. B. Clark	Margaret Dickson	*Roger Lambelin
John Hopper	Marshall P. Wilder	Tom Wood
John Keynes	*Mrs. John Laing	*Ulrich Brunner
Jubilee	Mrs. R. G. Sharman-	Vick's Caprice
Lady Helen Stewart	Crawford	Victor Verdier
La Reine		

Hybrid Tea

Admiral Schley	Edward Mawley	*Killarney
Admiral Ward	Elizabeth Barnes	*Killarney Brilliant
*Antoine Rivoire	Ethel Malcolm	*Killarney, White
*Arthur R. Goodwin	*Etoile de France	Killarney Queen
Augustus Hartmann	Eugene Boullet	King George V.
Autumn Tints	Farbenkönigin	Königin Carola
Avoca	Florence E. Coulth-	*Lady Alice Stanley
Bessie Brown	waite	*Lady Ashtown
*Betty	Florence Forrester	Lady Greenall
Brilliant	*Florence Pemberton	*Lady Mary Ward
British Queen	*Francis Scott Key	Lady Moyra Beauclerc
Camoëns	F. R. Patzer	*Lady Pirrie
Cardinal	Frau Lilla	Lady Ursula
Carine	Rautenstrauch	*La France†
*Chateau de Clos	Gainsborough	*La Tosca
Vougeot	G. Amedee Hammond	*Laurent Carle
Cherry Page	*General MacArthur	Leslie Holland
Cherry Ripe	*General-Superior	Liberty
Chrissie MacKellar	Arnold Janssen	Lieutenant Chaure
Cissie Easlea	George C. Waud	*Los Angeles
Cleveland	*George Dickson	Louise Lilia
Colleen	Gorgeous	Lyon Rose
Col. R. S. Williamson	Grace Molyneux	Mme. Abel Chatenay
Columbia	Grange Colombe	Mme. Bernier d'Arnex
Comtesse Icy Hardegg	Grossherzog Friedrich	*Mme. Caroline Testout
Countess Clanwilliam	*Gruss an Teplitz†	*Mme. Charles Lutaud
Countess of Derby	Gustav Grunerwald	Mme. Colette Martinet
Countess of Gosford	*Hadley	(Mme. Derepas-
Countess of Shaftes-	Hector MacKenzie	Matrat)
bury	Helen Gould	*Mme. Edmond
Dean Hole	H. E. Richardson	Rostand
Defiance	*Hoosier Beauty	Mme. Eugenie Boulet
Dorothy Page-Roberts	H. V. Machin	Mme. Felix Faure
Dr. J. Campbell Hall	Ideal	Mme. Jenny Gillemot
Dr. O'Donel Browne	Iona Herdman	*Mme. Jules Bouché
Duchess of Albany†	Irish Beauty	*Mme. Jules Grolez
Duchess of Sutherland	Irish Elegance	Mme. J. W. Budde
*Duchess of Wel-	*Irish Fireflame	*Mme. Leon Pain
lington†	James Coey	Mme. Maurice de Luze
Duchess of	Janet	*Mme. Melanie Soupert
Westminster	*Jonkheer J. L. Mock	Mme. P. Euler
Earl of Warwick	*Joseph Hill	Mme. Phillipe Rivoire
Ecarlate	Josephine	*Mme. Ravary
Edgar M. Burnett	*Kaiserin Auguste	Mme. Schwaller
Edith Part	Victoria	*Mme. Segond Weber



ROSA HUGONIS comes from Northern China and is perfectly hardy. Mr. E. H. Wilson, of the Arnold Arboretum, says of it: "It is an upright-growing Shrub with slender and spreading branches on which the fragrant flowers are borne in yard-long sprays of soft yellow. As I write in mid-November, the foliage is still on the Shrub and has assumed a dark purple tint." It blooms here two weeks ahead of any other rose—not a climber but a large bush rose which may be trained as here shown.

Hybrid Tea Roses, continued

Mlle. Aug. Guinoisseau	Mrs. Forde	Prince Engelbert
Mlle. Helena Cambier	Mrs. F. W. Vanderbilt	Charles d'Arenberg
Mlle. Marie Mascuraud	Mrs. George Gordon	Prince of Bulgaria
Mabel Drew	Mrs. George Norwood	Princess Bonnie
Magnafrano	Mrs. George Shawyer	Queen Beatrice
Majestic	Mrs. Harold Brocklebank	Queen Mary
Mama Looymans	Mrs. Harvey Thomas	*Radiance
Marcella	Mrs. Hugh Dickson	Red Columbia
Margaret Dickson	Mrs. J. H. Welch	Red-Letter Day
Hamill	Mrs. MacKellar	*Red Radiance
Mark Twain	Mrs. Maynard Sinton	Reine Carola de Saxe
Marquise de Querhoent	Mrs. Moorefield Storey	Reine Marguerite
*Marquise de Sinety	Mrs. R. D. McClure	d'Italie
*Mary, Countess of Ilchester	Mrs. Richard Draper	Rene Robbins
Max Hesdorffer	Mrs. Robert Garrett	Renee Wilmart Urban
May Miller	Mrs. Sam Ross	Rhea Reid
Meteor	Mrs. T. Hillas	Richmond
Mevrouw Dora Van Tets	Mrs. Theo. Roosevelt	Seabird
Milady	*Mrs. Wakefield Christie-Miller	Souv. de E. Guillard
Miss Cynthia Forde	Mrs. Wemyss Quin	*Souv. de Gustave Prat
*Mrs. Aaron Ward	*My Maryland	*Souv. du Pres. Carnot
Mrs. A. E. Coxhead	Natalie Bottner	Souv. of Wootton
Mrs. Ambrose Riccardio	Neervelt	Spectacular†
Mrs. Amy Hammond	Neerissa	*Sunburst
Mrs. Andrew Carnegie	Old-Gold	Taft Rose
Mrs. Archie Gray	Olivia	Veluwezoom†
*Mrs. A. R. Waddell	*Ophelia	Viscountess Enfield
Mrs. Bertram J. Walker	Panama	Viscountess Folkestone
Mrs. Chas. E. Pearson	Peerless	Virginia R. Coxet
Mrs. Chas. Hunter	Pernet's Triumph	Walter Speed
Mrs. Chas. Russell	*Pharisäer	Waltham's Scarlet
Mrs. Conway Jones	Pilgrim	W. E. Lippiatt
Mrs. Cornwallis West	President Vignet	Wellesley
Mrs. David Jardine	Premier	West Grove
Mrs. David McKee	Prima Donna†	*White Killarney
Mrs. Edward Powell		William Cooper
		*William Shean
		*Willowmere
		Winnie Davis

There are in this list other promising varieties not yet sufficiently tested to recommend.

Moss

Blanche Moreau	*Crested Moss	*Henri Martin
Blanche Roberts	Crimson Globe	Mousseline
Caroline Marneis	Eugene de Savoie	Princess Adelaide
Comtesse de Murinais	Glory of Mosses	Salet

Polyantha

Ænnchen Müller	Etoile de Mai	*Mme. Norbert Levasseur†
*Baby Dorothy†	F. J. Grootendorst	*Mlle. Cecile Brunner
*Baby Rambler†	*George Elger	*Maman Levavasseur†
Betsy Van Nes	Goldfinch	*Marie Pavie
Clotilde Soupert	*Gruss an Aachen	Mignon†
Echo	*Katharina Zeimet	Mignonette
*Ellen Poulsen	Leonie Lamesch	Miniature
*Erna Teschendorff	*Louise Walter†	

Polyantha Roses, continued

Mosella, T.P.
Mrs. W. H. Cutbush†
Mme. Jules Gouchault
Mrs. Taft†

*Orleans
Perle d'Or
Sweetheart†
*Tip-Top

Triomphe Orleanais
White Soupert
Yellow Soupert
Yvonne Rabier

Rugosa and Hybrids

*Agnes Emily Carman
Alice Aldrich
Amelia Graveaux
Beaute Poitevine
*Blanc Double de
Coubert
Chas. F. Worth
*Conrad Ferdinand
Meyer

Hansa
Mme. Chas. Frederick
Worth
Max Graf
*New Century
Nova Zembla
Regina Badet
Repens alba
Rosaie de l'Hay

Rosaie Parfum de
l'Hay
Rosa Tetankaba
*Rugosa alba
Rugosa magnifica
*Rugosa rubra
*Sir Thomas Lipton
(White Century)
Souv. de Pierre
Leperdrieux

Tea

Ada Carmody
*Alexander Hill Gray
Alliance Franco-Russe
Anna Oliver
Aurora
Beaute Inconstante
Betty Berkeley
Blumenschmidt
Bon Silene
Bride
*Bridesmaid
Canadian Belle
Catherine Mermet
Comtesse Riza du Parc
Comtesse Sophy Torby
Coquette de Lyon
Corallina
Corinna
Cornelia Cook
David Pradel
*Devoniensis†
Dr. Grill
*Duchesse de Brabant
Enchantress
Etoile de Lyon
Fr. von Marschall
General R. E. Lee
G. Nabonnand
Golden Gate
*Harry Kirk
Helen Good
Henry M. Stanley
*Hugo Roller
Isabella Sprunt
Ivory

J. B. Varonne
Königin Wilhelmina
*Lady Hillingdon
Lady Plymouth
Lady Roberts
Lena
Letty Coles
Mme. Antoine Mari
*Mme. Camille
Mme. Caroline Kuster
Mme. C. P. Strassheim
Mme. Derepas-Matrat†
Mme. de Vatre
Mme. de Watteville
Mme. Elie Lambert
Mme. F. Kruger
Mme. Hoste
Mme. Jean Dupuy
Mme. Jos. Schwartz
Mme. Lambard
Mme. Margottin
Mme. Olga
Mme. Rene Gerard
Mme. Vermorel
Mme. Welche
Mlle. J. Phillips
*Madison
*Maman Cochet†
*Maman Cochet, White
Marie Guillot
Marie Lambert
*Marie Van Houtte
Marion Dingee
Medea

*Miss Alice de
Rothschild
Molly S. Crawford
*Mrs. B. R. Cant
Mrs. Campbell Hall
Mrs. Foley-Hobbs
Mrs. Herbert Hawks-
worth
Mrs. Herbert Stevens
Mrs. Hubert Taylor
Mrs. Myles Kennedy
Mrs. S. T. Wright
Muriel Grahame
Nita Weldon
Papa Gontier
*Perle des Jardins
Perle des Jaunes
Princess Hohenzollern
Princess de Sagan
Queen Olga of Greece
Queen, The†
Rainbow
Rose d'Evian
*Safrano
Sombreuil
Souv. de Catherine
Guillot
*Souv. de Pierre
Notting
Sulphurea
Sunrise
Sunset
White Maman Cochet
*Wm. R. Smith†
Winter Gem

Bengal, Climber

Empress of China

Climbing Hybrid Tea

- | | | |
|--------------------------|-------------------------|------------------------|
| *Carmine Pillar (Paul's) | *Lady Ashtown, Cl. | Meteor, Climbing |
| *Gruss an Teplitz, Cl. | La France, Pink, Cl. | *Mrs. Robert Peary |
| *Kaiserin Auguste | Climbing | My Maryland, Cl. |
| Victoria, Climbing | *Mme. Caroline Testout, | Reine Marie Henriette, |
| Killarney, White, Cl. | Climbing | Climbing |
| Killarney, Climbing | Mme. Wagram | Souv. of Wootton, Cl. |

Climbing Moss

- | | | |
|------------------|-----------|----------|
| Cumberland Belle | *Le Poilu | Wichmoss |
|------------------|-----------|----------|

Multi flora

- | | | |
|---------------------|-----------------------|----------------|
| Aglaia | Miss Messman | Ramblers† |
| *American Pillar | Mosella, Climbing | *Tausendschön† |
| *Aunt Harriet | *Philadelphia Rambler | Thalia |
| Flower of Fairfield | Psyche | Trier |
| Geisha | Rambler, Crimson | Wartburg |

Noisette

- | | | |
|-----------------------|-----------------------|-----------------------|
| *Alister Stella Gray† | Lamarque | Reve d'Or |
| Bridesmaid, Climbing | *Mme. Alfred Carriere | Solfatare |
| Chromatella† | *Marechal Niel | *Wm. Allen Richardson |
| Cloth of Gold† | | |

Climbing Polyantha

- | | | |
|-----------------------|-------------------|----------------------|
| Mlle. Cecile Brunner, | Clotilde Soupert, | Frau Berta Guertler, |
| Climbing | Climbing | Climbing |

*Species**Sweetbriar*

- | | | |
|----------|--------------------|---------------------|
| Hugonis | Amy Robsart | Lady Penzance |
| Moyesii | Anne of Geierstein | *Sweetbriar, Common |
| Xanthina | | |

Climbing Tea

- | | | |
|-----------------------|-----------------------|------------------------|
| Devoniensis, Climbing | *Mme. Driout | Maman Cochet, White, |
| Gloire de Dijon | Mme. Jules Gravereaux | Climbing |
| Isabella Gray | *Maman Cochet, Pink, | Perle des Jardins, Cl. |
| James Sprunt | Climbing | Pillar of Gold. |

Wichuraiana and Hybrids

- | | | |
|-----------------------|------------------|-------------------------|
| Alba rubrifolia | *Emily Gray | *Paul's Scarlet Climber |
| *Alberic Barbier | Evangeline | Pearl Queen |
| *American Beauty, Cl. | Evergreen Gem | Prof. C. S. Sargent |
| *Aviateur Bleriot | *Excelsa | Robert Craig |
| *Bess Lovett | Farquhar | *Ruby Queen |
| Casimir Mouille | *Gardenia | *Shower of Gold |
| *Christine Wright | *Hiawatha | *Silver Moon |
| *Coronation | Jersey Beauty | Sodenia |
| Daybreak | Juanita | South Orange Perfection |
| Debutante | Lady Duncan | Sweetheart |
| Dorothy Dennison† | Lady Gay† | Universal Favorite |
| *Dorothy Perkins† | Longwood | W. C. Egan |
| *Dorothy Perkins, | Manda's Triumph | Wichmoss |
| White | *Mary Lovett† | *Wichuraiana |
| *Dorothy Perkins, | *May Queen | Wichuraiana |
| Red† | Minnehaha | variegata |
| *Dr. W. Van Fleet | Mrs. M. H. Walsh | |

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This is the dwarf-growing Polyantha Rose so popular now for edging and also for bedding. It is recommended for use in place of geraniums, because it is so hardy that it does not need to be replanted yearly.

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